

AU/AF FELLOWS/NNN/2002-03

AIR FORCE FELLOWS (SSS)

AIR UNIVERSITY

RESOURCE ALLOCATION:
THE DEPARTMENT OF DEFENSE'S ACHIELLE'S HEEL

by

Gary W. Holland, Lt Col, USAF

A Research Report Submitted

In Partial Fulfillment of the Graduation Requirements

Advisor: Lt Col Tony Klucking, USAF

Maxwell Air Force Base, Alabama

May 2003

Distribution A: Approved for public release; distribution unlimited.
--

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE MAY 2003		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE Resource Allocation: The Department of Defense's Achielle's Heel				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Air University Press Maxwell AFB, AL 36112-6615				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 68	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Disclaimer

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Contents

	<i>Page</i>
DISCLAIMER	ii
ILLUSTRATIONS	iv
PREFACE	v
ABSTRACT	vii
INTRODUCTION	1
RECENT HISTORY OF DOD REORGANIZATIONS	4
THE RESOURCE ALLOCATION PROCESS	25
RECOMMENDATIONS	51

Illustrations

	<i>Page</i>
Figure 1. The Resource Allocation Process	26
Figure 2. JWCA ORGANIZATION.....	33
Figure 3. Current JROC Membership.....	36
Figure 4. The JROC Formal Review Process	38
Figure 5. Future Years Defense Program (FYDP).....	40
Figure 6. Theory of PPBS.....	41
Figure 7. The Reality of PPBS.....	44
Figure 8. Acquisition System Milestones and Phases	47

Preface

Anyone who has had the opportunity to support the Resource Allocation Process understands that it is an iterative process and many will complain about how frustrating and painful it can be to take an issue from cradle to grave. This pain is caused because of two reasons. One, it comes from trying to work from within the highly complex process and having to compete with parochialism either within the individuals own Service or parochialism from between the services. The second cause for the pain is cause by those individuals who are sometimes referred to as “visionaries”. These people have the ability to see beyond good of the individual and attempt to either make the system work in the interest of true Jointness, or they try to work outside of the proverbial box to reach the end state. Either way is usually an exercise in futility. *Resource Allocation: The Department of Defense’s Achilles’ Heel* illuminates a process that has evolved over the years but has become stagnant since the end of the Cold War and makes recommendations to reform the process to enable it to look forward to the challenges of the 21st century.

This study would not have been possible without the friendship, support, guidance, and participation of a number of people and I would like to acknowledge their assistance here. I especially want to thank Lt Col Tony “Rooster” Klucking who provided invaluable “strategic” direction and helped me focus in the right direction. This paper would not have been possible without Rooster’s advice and an occasional “kick on the rudder” when I would attempt to get off course; Lt Col Mitch Delarosa, whose acquisition expertise and operational insight continues to

provide a breath of fresh air; Lt Col Brian Dougherty, whose programming and requirements vision continue to amaze me. They, along with many others, may not know it, but their guidance and insights kept me both focused and motivated.

Finally, to my best friend and wife, Kim. All I can say is thanks for your steadfast support to me and the organizations we've been associated with along the way. You truly are the standard by which others are judged.

Abstract

There have been no less than 6 attempts by the civilian leadership to “assist” the military in their organizational efforts. Many of these attempts were evolutionary in their making, but all were due to a belief that there was a sense of urgency that the military was either unable or unwilling to police itself in both organization and resource allocation. The Defense Reorganization Act of 1947 was a step in the right direction by combining the two departments, which as a result, also combined the two separate budgets. Unfortunately, the interservice rivalry continued for resources that led to additional amendments and then finally, another major reorganization in 1958. However, while improving, it still was not perfect. This was evident by then President Eisenhower saying that even though defense organization was heading in the right direction by the strengthening of the unified command structure, he still believed the evolution would continue. A sense of urgency presented itself in the 1980’s when the failure of Operation EAGLE CLAW, the attempt to rescue of American hostages in Iran, highlighted a significant problem imbedded in the Department of Defense: the inability of the military services to work effectively together as a joint team while involved in military operations. This, combined with the bombing of the Marine Corps barracks in Lebanon, and the successful, but challenging operation in Granada, simply provided grist for the mill in supporting the belief of many in Congress that the DoD once again, could not work together to police itself. Because of this, the resulting corrective action now known as the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA) was passed. Now, 17 years later, the DoD still has some

unfinished business from GNA; overhauling the resource allocation process, and it is now more important than ever to ensure the DoD is structured to handle the demands of the 21st century. This paper looks at the history of defense reform/reorganization, the environment since GNA, and how once again the military services are unable to work effectively together as a joint team, only this time with respect to the resource allocation process. It focuses on the JROC's purpose and responsibilities, the PPBS, and finally on the acquisition process and its functionality in light of today's rapidly evolving technology.

Chapter 1

Introduction

True preparedness now means preparedness not alone in armaments and numbers of men, but preparedness in organization also. It means establishing in peacetime the kind of military organization which will be able to meet the test of sudden attack quickly and without having to improvise radical readjustment in structure and habits.

— President Harry Truman¹
December 19, 1945

Background

President Truman's words nearly fifty years ago ring just as true today as they did at the end of World War II. However, since these words were spoken, there have been no less than six attempts by the electorate to reorganize or reform the military departments in their organizational and resource allocation efforts. While some of these attempts were originated in reform and some led to reorganization, they all were due to a sense of urgency believing that the military was either unable or unwilling to police itself either in basic organization or in resource allocation.

“Reform” and “Reorganization” are sometimes used interchangeably, yet there is a distinct difference. In simple terms, reform can be thought of as a “process-oriented” change where as reorganization is an “organizational or structure-oriented” change. This is an important

difference, because people normally will be more supportive for process change (reform) if they do not feel their jobs are threatened (reorganization).

An example of reorganization was The National Security Act of 1947 (NSA), the first major reorganization following WWII. The NSA was the result of compromise between opposing groups – those that favored greater centralization and unification in the department of Defense and those that preferred greater autonomy of military departments. In the end, the NSA moved in the direction of unification, a direction that continues to press for change.

Equally as important is an example of reform that occurred during the early 1960's. Secretary of Defense McNamara developed the Planning, Programming, and Budget System (PPBS), a system designed to address the problems traditionally associated with resource allocation.

Finally, the most recent example of reorganization occurred in the 1980's. The failure of Operation EAGLE CLAW, the attempt to rescue of American hostages in Iran, highlighted a significant problem imbedded in the Department of Defense: the inability of the military services to work effectively together as a joint team while involved in military operations. This, combined with the bombing of the Marine Corps barracks in Lebanon, and the successful, but challenging operation in Granada, simply provided grist for the mill in supporting the belief of many in Congress that the DoD once again, could not work together to police itself. Because of this, the resulting corrective action now known as the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA) was passed. The act clearly established the future of joint operations. Unfortunately though, seventeen years later, the DoD has some unfinished business from the original direction of the GNA—reforming the resource allocation process.

¹ Herman S. Wolk, Planning and Organizing the Postwar Air Force 1943-1947, Office of Air Force History, USAF,

Purpose

The purpose of this paper is to look at the current resource allocation process and to make recommendations necessary to complete the unfinished business of the GNA. It will focus on the JROC's purpose and responsibilities, the PPBS, and finally on the acquisition process and its functionality in light of today's rapidly evolving technology. The choice is clear. The unfinished business of the GNA can either be accomplished through reform from within the DoD, or they will face a reorganization effort by the electorate as a result of their unwillingness to reform. It is more important now than ever before to ensure the DoD is structured to handle the demands of the 21st century.

Chapter 2

Recent History Of DoD Reorganizations

“The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any Subject relating to the Duties of their respective Offices, ...”

— The Constitution of the United States²
Article II, Section 2.

The Constitution of the United States clearly established both the role of the President and the military in the chain of command. This role, while necessary for democratically elected governments, it is still often stressed in times of war. Eliot A. Cohen in his book, *Supreme Command*, presents four separate examples of this conflict.³ However, what is seldom documented is the conflict between the United States Congress and the Department of Defense. A conflict which, several times within the last fifty years, resulted in legislation being enacted to resolve what Congress perceived as the DoD being either unwilling or unable to police itself by allowing parochialism by the individual services to become more important than the overall good of the country.

Just as it does for the President, The Constitution of the United States clearly spells out the responsibilities of Congress with respect to the military. These responsibilities cover a broad range of issues ranging from the power to declare war, raise and support armies and navies,

² The Constitution of the United States, Article II, Section 2

³ Eliot A. Cohen, *Supreme Command*, Simon & Schuster, Inc., 2002. In this book, Elliot Cohen examines four separate cases involving conflict between civilian and military leadership. One of these cases is with President Abraham Lincoln during the American Civil War.

provide infrastructure such as posts and ports and more importantly, to make laws in which departments are required to operate under. Specifically the Constitution states:

The Congress shall have power to lay and collect Taxes, Duties, Imports and Excises, to pay the Debts and provide for the common Defense and general Welfare of the United States...

To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years; [Clause 11]

To provide and maintain a Navy; [Clause 12]

To make Rules for the Government and Regulation of the land and naval Force; [Clause 13]

To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress; [Clause 15]

In short, Congress not only drives the boat, but as documented below, has occasionally felt they needed to kicked the rudder a little to steer the Department of Defense in the direction Congress believed it needed to go.

The Last 50 Years

The United States, returning from an allied victory in WWI and having made the world safe for democracy, demobilized by drawing down its standing forces to return to isolationism. This was evident in the fact that when the distant sounds of the beating drums of war began to rise in intensity during the mid-30's, the US was very reluctant to become involved in another war away from home. So reluctant, in fact, the U.S. passed the Neutrality Act of 1935 and President Roosevelt signed it in August 1935.⁴ Though amended several times, the Isolationist view of the war ended in 1941 at Pearl Harbor.

The National Security Act Of 1947

In 1941, the United States found itself in the middle of another world war and the National Military Establishment was made up of two separate military departments, the

Department of War, which included the Army Air Corps and the Army, and the Department of Navy, which included the Navy and the Marine Corps. They were both Cabinet Departments with a seat at the Cabinet, and not only did they both have their own budget authority, but they also had direct access to Congress and the Executive branch. This also meant that they had separate chains of command and would and could operate (and compete) independently each other. Any recommended change organizational structure would be viewed as a demotion.

In World War II, with fighting in both Europe and the Pacific, meant that there would be different theaters of operations and different capabilities required. Organizationally however, the military was not designed to operate in this manner. So, in an effort to deal with the myriad of cross-service issues, informal committees within the Pentagon were formed. These committees were organized in 1942 under the newly created Joint Chiefs of Staff (JCS) and would attempt to work out service related disagreements, sometimes being successful and sometimes not.⁵ In other words these committees attempted to blur the lines of distinction between the services and minimize the differences in the two separate departments.

As World War II came to an end, the United States found itself in a position never before seen. A position of a Super Power, and this position now had a very revolutionary effect on how the U.S. view its strategic thinking. According to former Under Secretary of Defense for Policy Robert W. Komer:

It marked our definitive entry into balance of power politics, further confirmed the value of overseas force projection, and also saw the birth of elaborate joint and combined planning mechanisms...For the first time, serious strategic differences between the services...were hashed out in the new JCS forum that was

⁴ Neutrality Act, The Columbia Electronic Encyclopedia, Copyright 1994,2000, Columbia University Press

⁵ William J. Lynn, "The Wars Within: The Joint Military Structure and Its Critics", Reorganizing America's Defense, p. 171.

created in 1942 to facilitate development of U.S. positions vis-à-vis the British Chiefs of Staff (the model for the JCS).⁶

This newfound position on the world stage required the executive and legislative branches of government combined with the military departments to rethink the organizational makeup of the military. Clearly, in President Truman's mind unification of the departments was a must. He believed that after the involvement in a world war with different theaters of operations requiring different approaches would and should drive a new way of thinking. What he feared was that the departments were unable to police themselves not only in organizational structure but resource allocation as well. Truman knew that the interservice rivalries (to include dual and often competing budgets) were not only inefficient but would impede the services ability to see the overall good of unification. What he did not say, but his actions seemed to convey, was a belief that this issue would in effect, become the DoD's Achilles' Heel.

In an effort to strengthen his position, President Truman's unification proposal coincided with the postwar congressional investigation of the Pearl Harbor debacle, an investigation that each day seemed to uncover more and more shocking examples of the need for service unification⁷. Adding an additional level of support for the President and providing further support for the idea of unification was General Eisenhower. As reflected in his memoirs about this time period, General Eisenhower stated:

The accomplishment in Europe of the three services operating under unified command strongly influenced my determined advocacy of a similar type of organization in postwar Washington.⁸

The time was right for reorganization. The Executive branch knew it, the legislative branch new it, and the military knew it. Unfortunately though, the problem arose when the military could not

⁶ Robert W. Komer, "Strategymaking in the Pentagon," *Reorganizing America's Defense*, ed. by Robert J. Art, Vincent Davis and Samuel P. Huntington (McLean, VA: Pergamon-Brassey's, 1985, pp. 207-208.

agree on how the final organizational structure should look. Both the Department of War and Department of Navy agreed that looking at the world as theaters of operations was correct and they also agreed that the JCS had not only worked well, but should stay in the organizational structure. However, this is where the agreements ended. The Department of War believed that a civilian secretary should have centralized control with a single military chief of staff having operational control. Looking through a different set of eyes, the Department of Navy believed that direction should come from the National Security Council and operationally controlled by the separate military departments. Both however, were concerned about the loss of their independent budget authority.

President Truman became increasingly frustrated, but still deeply believed the issue was important enough to be made through statutory enactment and therefore allowed the debate to continue.⁹ The debates, which lasted for two years, was a bitter fought battle between the two services and more times than not, were fought publicly. This only added to President's frustration and forced him to take initial action by creating the unified commands through executive order.

Congress and the President finally reached a negotiated solution and on July 27, 1947, President Truman signed into law the National Security Act of 1947. The postwar national security framework create by the NSA included the National Military Establishment (NME) led by a cabinet-level Secretary of Defense. Within the NME, the formerly separate, cabinet-level Department of War and Department of Navy were subordinated to the Secretary of Defense.

⁷ Omar N. Bradley, *A General's Life-An Autobiography*, New York: Simon and Schuster, 1983, p.465.

⁸ Dwight D. Eisenhower, *Crusade In Europe*, Garden City, NY, Doubleday, 1948, p. 262

⁹ R. Earl McClendon, "Unification of the Armed Forces: Administrative and Legislative Developments 1945-1949," *Air University Documentary Research Study No.36* (Research Studies Institute, Maxwell Air Force Base, AL: April 1952) p. 27.

Furthermore, the NSA created a third department, the Department of the Air Force, from the former Army Air Corps, as an independent branch of the military. The NSA also created the Joint Chiefs of Staff to serve as the principal military advisors to the President and the Secretary of Defense as well as another basic but often overlooked task.¹⁰ That task was the combining of budgets from separate military departments into one single military budget. However, what was not overlooked was the verbiage in the Act. Unfortunately, the Executive Order that implemented the Act had different wording from the actual Act, and at the first opportunity, the debates between the services began to surface.¹¹

Key West Agreement Of 1948

When the Soviets invaded Czechoslovakia, the US fearing a Soviet invasion of Europe, developed a plan called Operation HALFMOON to counter this new threat. The services took advantage of the difference in wording between the Executive Order and the National Security Act and began to disagree on basic issues of roles and responsibilities required to support HALFMOON. Once again, the failure to properly police themselves through a fair resource allocation process, led the services to having major disagreements. These disagreements came to a head when the JCS began to develop their first-ever military budget to support the new unified war plan. The DoD's Achilles' Heel was beginning to ache. The Air Force, believing they were getting a disproportionate share of the budget to support the operation, went around the President and direct to Congress seeking support. Likewise, the Navy believed they were not being included at the appropriate level for the operation and began to publicly argue with the Air Force. This public fighting between the services forced Secretary of Defense Forrestal to call a

¹⁰ "The Evolution of the U.S. Intelligence Community-An Historical Overview," *Commission on the Roles and Capabilities of the United States Intelligence Community*. pp 9-10. <http://www.access.gpo.gov/intelligence>

meeting with the services Chief's of Staff. The purpose of this meeting, held in Key West, Florida was to resolve the differences between the services and either work out an agreement, or if an agreement could not be reached, then the Secretary of Defense would make a decision unilaterally. The agreement ultimately reached was crafted into a formal memorandum issued by Forrestal formally titled "Functions of the Armed Forces and the Joint Chiefs of Staff", but became known as the Key West Agreement.¹²

This agreement became one of the first documented agreements on roles and missions between the services responsibilities. The roles and missions were defined as follows:¹³

The Air Force's role would be focus on "prompt and sustained combat operations in the air." Additionally, the Air Force was officially responsible for "land based air defense" as their primary function, along with the "Interdiction of seapower, antisubmarine warfare, and mindlaying" as collateral functions.

The Army's role would be to "organize, train, and equip Army forces for the conduct of prompt and sustained combat operations on land...and such aviation and water transport as may be organic therein.

The Navy and Marines role would be "organize, train and equip...forces for the conduct of prompt and sustained combat operations at sea and for air and land operations incident thereto...including operations of sea-based aircraft and their land-based naval air components." Additionally, the Marines role would include "such aviation as may be organic therein...provide Fleet Marine Forces of combined Arms...for service with the Fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. These functions do not contemplate the creation of a second land army.

The Secretary of Defense's memorandum was intended help the services cooperate better with each other, but as the budget battles began, it proved to be a dismal failure. With limited defense dollars to go around, the services felt they had their own programs to now protect and believed

¹¹ R. Earl McClendon, "Unification of the Armed Forces: Administrative and Legislative Developments 1945-1949", *Air University Documentary Research Study No. 36*, Maxwell Air Force Base, AL, April 1952, p.27.

¹² Morton H. Halperin and David Halperin, "The Key West Key", *Foreign Policy* no.53 (Winter 1983-1984); 114-130.

they were wasting the hard-to-come-by resources when supporting their sister services in collateral missions.¹⁴

The National Security Act Amendments Of 1949

During 1948, the Congress established “The Commission on Organization of Executive Branch of the Government.” Chaired by former President Herbert Hoover, the Commission established a sub-group to look at national security organizations.¹⁵ This result of this group, headed by New York businessman Ferdinand Eberstadt was the submission of The Eberstadt Report. This report found that basic organizational arrangements for national security were sound, but that the Department of Defense was not working well due to service parochialism and that “one of the greatest needs is to elevate military thinking to a plane above individual service aims and ambitions”,¹⁶ thus highlighting the services’ unwillingness to police itself.

As a result of the Commission’s report, on August 10, 1949 Congress passed Public Law 81-216: “The National Security Act Amendments of 1949”, which amended the original National Security Act of 1947. This amendment designated the services as “military departments” vice “executive departments” and removed the services from the National Security Council. Additionally, it officially created the position of “Chairman, JCS” and changed the billet of “Chief of Staff” (of each respective service) to “Commander-in-Chief (of each respective service) while indirectly strengthening the power of the unified commanders.

¹³ “Chronology of Changes in Key West Agreements, April 1948-January 1958,” Historical Section, Joint Chiefs of Staff, February 7, 1958, pp 1-4.

¹⁴ Halperin and Halperin. pp. 114-30.

¹⁵ “The Evolution of the U.S. Intelligence Community-An Historical Overview,” *Commission on the Roles and Capabilities of the United States Intelligence Community*. p 10.

Revolt Of The Admirals

General Omar Bradley was sworn in as the first Chairman of the Joint Chiefs of Staff on August 16, 1949 and initially believed that the position of Chairman would be that of a moderator. Unfortunately, without a “formal” vote among the JCS, the thought of being a moderator was quickly discounted. During the infamous heated debates between the Air Force and the Navy known as “The Revolt of the Admirals” the disagreements severely challenged the authority and leadership of the fledgling NME.

As nuclear weapons became the flavor of choice in America’s defense arsenal, and the Air Force became the preferred means in which to deliver the country’s strategic response, the Navy began to feel as though they were being relegated to a subordinate mission. The defense budget held a finite amount of dollars, and the Air Force was pursuing their B-36 intercontinental bomber as the next generation weapon system that was required to deliver the nuclear bomb. In June 1949, the Navy accused the Air Force of pursuing a “billion dollar blunder” that was only being pursued due to the ties of the contractor to the Air Force Secretary (somehow an “anonymous document” was circulated throughout Washington stating as such). The Navy, pursuing their “Super Carrier” idea and argued that strategic bombing was shortsighted. The real issue between the Air Force and the Navy was responsibility for the strategic atomic mission, which ultimately was the key to the prime share of the defense budget. Secretary of the Air Force Symington was well aware that the Air Force would have “to prevent Navy encroachment on the Air Force responsibility for strategic bombing operations.” Likewise, aviators who were

¹⁶ *Task Force Report on National Security Organization*. Prepared for the Commission on Organization of the Executive Branch of the Government (Washington: Government Printing Office, January 1949) p. x.

determined to build forces capable of delivering the atomic bomb dominated the Navy's postwar leadership.¹⁷ This set the stage for conflict.

As coverage between the Air Force's "troubled" B-36 program and the Navy's super carrier approach reached a fever pitch, the ugliness of the conflict was highlighted to the public. During a press conference, it was divulged that the author of the so-called "anonymous document" was Cedric R. Worth, civilian assistant to the Under Secretary of the Navy Dan A. Kimball. Subsequently, a Navy court of inquiry determined that Worth, a former commander in the Naval Reserve, had been aided by information supplied by Glen L. Martin, an aircraft manufacturer who had recently lost a contract when funds were diverted to the B-36.¹⁸

Congress was forced to hold hearings to investigate charges against Symington and to conduct a comprehensive investigation of the B-36 matter as well as the decision to cancel the supercarrier along with the overall issue of roles and missions. With Chairman Carl Vinson of Georgia presiding, the House committee found no evidence to substantiate the charges and cleared all USAF officials. The committee recommended that Cedric Worth be fired and stated that "There was 'not one iota, not one scintilla of evidence'".¹⁹

The DoD's Achilles' Heel was starting to become inflamed. The final nail-in-the-coffin came from General Bradley testifying before Vinson's committee. After testifying that "large scale amphibious operations will never occur again because the atomic bomb properly delivered almost precludes such a possibility", he concluded his remarks by saying:

Many in the Navy are completely against unity of command and planning as established in the laws passed by the Congress of the United States. Despite protestations to the contrary, I believe the Navy has opposed unification from the beginning, and they have not, in spirit as well as deed, accepted it completely to

¹⁷ Herman S. Wolk, "Revolt of the Admirals," *Air Force Magazine*, May 1988, Vol.73, No. 5.

¹⁸ Ibid, p.5.

¹⁹ Ibid, p.5-6.

date. As a policy, yes, but as the final and authoritative vehicle for planning our collective defense, no. World War II should have taught all military men that our military forces are one team—in the game to win regardless who carries the ball. This is no time for ‘fancy Dans’ who won’t hit the line with all they have on every play, unless they can call the signals. Each player on this team—whether he shines in the spotlight of the backfield or eats dirt in the line—must be All American.²⁰

These hearings, although highlighted in the press, were soon overshadowed by world events deemed more important and critical. The Russians had just exploded their first nuclear weapon and communist China was declaring victory over the Nationalist Chinese. Unfortunately though, the military’s inability to police itself was becoming a constant theme. As Millet and Maslowski highlighted in their book *“For the Common Defense, A Military History of the United States of America”*:

For the Armed forces, the functional and organizational disputes of the late 1940’s helped create an environment that encouraged civilian intervention in military affairs, even in matters that might have been narrowly interpreted as “internal, professional” matters. The postwar years opened an area of controversy about the relationship of the armed forces to reform within the American society.²¹

Eisenhower’s Attempt To Reform

When Dwight Eisenhower assumed the Presidency in January 1953, he knew all too well the problems and challenges within the Department of Defense. Knowing where many of the skeletons were hidden, he directed the standing up of a committee to review the DoD. Named the “Committee on DoD Organization”, this independent study was conducted by the Rockefeller Brothers Fund, Inc. Nelson Rockefeller acted as the chair of the committee, and made sure the make-up of the committee included JCS Chairman General Bradley and former

²⁰ Ibid. Bradley, p. 510.

²¹ Alan R. Millett and Peter Maslowski, *For the Common Defense: A Military History of the United States of America*, New York: Free Press, 1984, pp.479-480.

Defense Secretary Lovett. The objectives of this committee were to develop to a clear and unchallenged responsibility in the Defense Establishment with maximum effectiveness at minimum cost, which would lead to the best possible military plans.²²

The result of this study highlighted the fact that the Services' had once again "become competitive rather than complementary".²³ Additionally, the Rockefeller Study recommended that all of the operational forces become organized into unified commands to perform functional missions based on strategic requirements, and designate both the service chiefs and department secretaries as being only responsible for recruitment, training, research and development, procurement, and supply for the unified commands.²⁴ These recommendations became the foundation of what became known as Eisenhower's "Reorganization Plan No. 6".

Eisenhower believed the original Key West agreements led to confusion. In his briefing to Congress on April 30, 1953, he stated,

The provision of the Key West Agreement, under which the Joint Chiefs of Staff designate one of their members as an executive agent for each unified command, has led to considerable confusion and misunderstanding with respect to the relationship of the JCS to the Secretary of Defense, and the relationship of the military chief of each service to the civilian Secretary of his military department.²⁵

To correct this confusion, President Eisenhower directed the Secretary of Defense to "designate in each case a military department to serve as the executive agent for a unified command. Under this new arrangement the channel of responsibility and authority to a commander of a unified command will unmistakably be from the President to the Secretary of

²² Harry B. Yoshpe and Theodore W. Bauer, *Defense Organization and Management*, Industrial College of the Armed Forces, 1967, p.32.

²³ "International Security—The Military Aspect," *Report of Panel II of the Special Studies Project*, Rockefeller Brothers Fund, Inc., 1958, p.3.

²⁴ Wayne E. Whitlatch, "The Legislative Evolution and Future of the Unified Command," Air Command and Staff College, Air University, Maxwell AFB, al, June 1966, p.54.

Defense to the designated civilian secretary of a military department.²⁶ Likewise, additional direction was given to remove the service chiefs from their executive agent role and increased the authority of the Chairman JCS.²⁷

The Defense Reorganization Act Of 1958

Eisenhower's "Reorganization Plan No. 6" may have clarified the lines of authority, but it did little to reduce the interservice rivalries. Technology increases combined with new advances in science were beginning to blur the traditional lanes in which weapon systems were accustomed to being used (a challenge that is ongoing even today). As one would expect, each of the services began to build justification for the new weapon systems, which as one would expect directly fueled the interservice rivalries. Likewise, these technological advances were beginning to have direct impact on the cost of weapon systems that led Congress to recognize that, the Department of Defense was having a difficult time in being able to police itself. Something needed to be done. That "something" was highlighted in 1956 by one member of the House Appropriations Committee who was quoted as saying..."Each service, it would seem, is striving to acquire an arsenal of weapons complete in itself to carry out any and all possible missions. It is the firm belief of the committee that this matter of rivalry is getting completely out of control. It is expensive and undesirable, and points up the need for more effective control and direction. A sincere and self-sacrificing effort must be made."²⁸ The DoD's chronic problem of its Achilles' Heel had raised its ugly head.

²⁵ *The Department of Defense: Documents on establishment and Organization, 1944-1978*, ed. by Alice C. Cole, Washington: OSD Historical Office, 1978, pp. 151-152.

²⁶ *Ibid.*p.152.

²⁷ *Ibid.*p.154.

²⁸ Yoshpe and Bauer, p. 35.

Finally, in 1958 during his annual State of the Union speech, Eisenhower directly appealed to Congress saying that additional defense reforms were imperative. He said... “Some of the important new weapons which technology has produced do not fit into any existing service pattern. They cut across all services, involve all services, and transcend all services, at every stage from development to operation. In some instances they defy classification according to branch of service.”²⁹

Following-up on his State of the Union speech, Eisenhower delivered a message to Congress on April 3, 1958, stating that... “Separate ground, sea, and air warfare is gone forever. If ever again we should be involved in war, we will fight it in all elements, with all Services, as one single concentrated effort. Peacetime preparation and organizational activity must conform to this fact.”³⁰ As a result of his beliefs, Eisenhower recommended giving the CJCS the right to vote and to shift service-related administrative duties from JCS back to the services. He believed doing this would make the entire JCS non-parochial. However, in doing so, Eisenhower believed that single service vetoes on joint staff actions should not be allowed or the joint staff would not be an independent body. Finally, Eisenhower recommended that combatant commands establish a structure to promote integrated operations and it was this recommendation that was his real objective in reforming the defense establishment.³¹ He felt that this was the only way to remove the individual services influence in joint matters. This is clearly reflected in excerpts taken from his April 3 message, where he stated:

We must organize our fighting forces into operational commands that are truly unified; each assigned a mission in full accord with our overall military objectives. This lesson, taught by World War II, I learned from firsthand experience. With rare exceptions, as I stated before, there can no longer be

²⁹ Ibid, p.37

³⁰ Ibid, The Department of Defense: Documents on establishment and Organization, 1944-1978, p. 181

³¹ Ibid, p.181

separate ground, sea, or air battles...We must recognize that by law our military organization still reflects the traditional concepts of separate forces for land, sea, and air operations, despite a Congressional assertion in the same law favoring “their integration into an efficient team of land, naval, and air forces...”³²

One additional area that greatly concerned Eisenhower was one of the same issues that President Truman had faced. That concern was interservice rivalry when it came to issues with the budget and the resource allocation process. In his April 3 message to Congress, Eisenhower pointed out his distaste for the current budget process and felt the only way to deal with this was to strengthen the power of the Secretary of Defense and to reduce the influence of the individual service chiefs.

I regard it as fundamental that the Secretary, as civilian head of the Department, should have greater flexibility in money matters, both among and within the military departments. Fairly exercised, it will go far toward stopping the services from vying with each other for Congressional and public favor...Today most of our defense funds are appropriated not to the Secretary of Defense but rather to the military departments...The Secretary of Defense needs greater control over the distribution of functions in his department. His authority must be freed of legal restrictions derived from pre-missile, pre-nuclear concepts of warfare. Various provisions of this kind becloud his authority.³³

President Eisenhower realized there was one big hurdle to cross if there was going to be another defense reorganization. That hurdle was to correct language in the original National Defense Act of 1947. He told Congress:

Let us no longer give legal support to efforts to weaken the authority of the Secretary. On this point the law itself invites controversy. On the one hand, the National Security Act give the Secretary of Defense ‘direction, authority, and control’ over his entire department. Yet the same law provides that the military departments are to be ‘separated administered’ by their respective secretaries. This is not merely inconsistent and confusing. It is a hindrance for efficient administration. The contradictory concept, however that three military departments can be at once administered separately, yet directed by one administrator who is supposed to establish ‘integrated policies and procedures’ has encouraged endless, fruitless argument. Such provisions unavoidably abrade

³² Ibid. p. 179.

³³ Ibid. pp. 184-185.

the unity of the Defense Department...I suggest that we be done with prescribing controversy by law.³⁴

Finally after nine years of interservice rivalries, Congressional hearings and numerous inputs from the Rockefeller study, on August 6, 1958, President Eisenhower signed into law The Defense Reorganization Act of 1958. Although he did not get everything he believed was needed, what he was able to push through was very significant. The powers of the Secretary were significantly strengthened (which strength would be used very effectively later in the McNamara's era). For the first time, the SECDEF had the authority to enhance overall defense effectiveness, economy, or efficiency by combining any supply and service activity common to more than one military department. The Act also made the Chairman a voting member in JCS decisions and directed the establishment of unified and specified commands and directed that the commanders of these unified and specified commands would have "full operational command of the forces assigned to them. Finally, the act also changed the relationship of the Service Chiefs by stating that each military department "shall be separately organized under its own Secretary and shall function under the direction, authority, and control of the Secretary of Defense.." ³⁵ Though not perfect, The Defense Reorganization Act of 1958 was a step in the right direction, just not the final step. In fact, it was a step Eisenhower believed was just another step toward what the majority of experienced military men knew was necessary and that new developments would demand further revision.³⁶

³⁴ Ibid.

³⁵ Ibid. pp. 189-199.

³⁶ Dwight D. Eisenhower, *The White House Years: Waging Peace. 1956-1961*, Garden City, NY: Doubleday, 1963, p.253.

1959-1985 The Calm Years

The steps taken during the next 26 years were relatively small compared to the steps taken by the Eisenhower administration. Although there were numerous tweaks and adjustments throughout the years, there were also numerous defense organization related studies and some significant process reforms. The best know and most significant of the process reforms is also one of the most lasting, challenging and confusing processes ever to have been implemented--McNamara's Planning, Programming, and Budgeting System (PPBS).

The McNamara Era

During the 1960 presidential campaign between Richard M. Nixon and John F. Kennedy, national security and the ability of the DoD to support the national security were major issues. Senator Kennedy appointed a committee of six civilians headed by Senator W. Stuart Symington to make recommendations about the management and administration of the Department of Defense. The committee's report suggested that reorganization of the Department of Defense was needed because the DoD was "still patterned primarily on a design conceived in the light of lessons learned in World War II, which are now obsolete."³⁷ As a result, harsh comments such as this led the Executive branch to review the DoD.

Robert S. McNamara, the newly appointed Secretary of Defense, was eager to take the reigns and upon reviewing the Defense Reorganization Act of 1958, determined that he had the power to make the requisite changes he believed were needed. Coming from a background in corporate America where success was a result of efficiency, he believed the main problem standing in the way of efficient management of the DoD's resources was the absence of the management tools needed to make sound decisions on really crucial issues of national security.

He rejected the radical organizational changes recommended by the Symington Report and argued, “at the end we must have one defense policy, not three conflicting defense policies. And it is the job of the Secretary and his staff to make sure that this is the case.”³⁸

McNamara made numerous organizational changes in his first two years at the helm.³⁹ He established the National Military Command System consisting of the National Military Command Center in the Pentagon, an underground alternative center, and the National Emergency Airborne Command Post, all of which we seem to take for granted today. However, arguably his most notable change was the establishment of the Planning, Programming, and Budgeting System (PPBS). Believing as many of his predecessors, McNamara was concerned that the resource allocation process had grown out-of-control and unmanageable with its present design. As a result of his belief, he directed Charles J. Hitch, the DoD Comptroller, to design a new system to assist in making choices about the allocation of resources among a number of competing programs. The result was the PPBS and officially it was to provide a more thorough, analytical, and systematic way for the administration to make critical independent national security decisions with particular reference to force structure, weapon systems, and costs.⁴⁰ This system became so embedded in the Department of Defense that other than some minor attempts and adjustments (minor as compared to McNamara’s PPBS) to the organization and resource allocation process of the Defense Department, in principle, remained unchanged until the decade of the 80’s. The minor tweaks and adjustments signaled that all was well within the department. However, a sense of urgency soon presented itself in the eyes of Congress.

³⁷ Roger R. Trask and Alfred Goldberg, “The Department of Defense 1947-1997-Organization and Leaders”, Historical Office, Office of the Secretary of Defense, Washington D.C., 1997, p.32

³⁸ SECDEF Histories-“Robert McNamara,”

http://www.defenselink.mil/specials/secdef_histories/bios/mcnamara.htm.

³⁹ Ibid.

⁴⁰ Roger R. Trask and Alfred Goldberg, p. 34.

The Achilles' Heel Becomes Chronic In The 80's

The failure of Operation EAGLE CLAW, the attempt to rescue of American hostages in Iran, highlighted a significant problem imbedded in the Department of Defense: the inability of the military services to work effectively together as a joint team while involved in military operations. It also highlighted a much larger issue; an issue of apparent impotence. In the court of world opinion, America had become impotent. When the rescue attempt failed, the failure seemed to strike at the heart of America's soul. In fact, many believed this tragedy was the overarching cause for the defeat of then President Carter in the 1980 Presidential election.⁴¹ The American people began to ask how could America become so impotent, and as a result of these questions, Congress wanted answers.

One of the first answers to surface was the competition of resources within the missions of the services. Failures identified in the after action reports highlighted the fact that the special operation forces (SOF) had severely deteriorated. This deterioration was primarily due to both the low priority and the organizational structure the services placed on SOF after the Vietnam War. This low priority was not only reflected in the Services' core missions (the SOF were handed around within each service, but were never structured to work together as a cohesive unit) but in budget process, as well. In short, the EAGLE CLAW after action reports reflected that one of the causes of the deterioration of the SOF assets was in part due to the dollars budgeted for sustainment and modifications for the SOF assets were being reprogrammed by the Services for programs the Services deemed of their higher priority.⁴²

⁴¹ James H. Kyle, *The Guts to Try*, Crown Publishers, Inc., New York, NY, 1990, p. 339.

⁴² Interview with USAF (ret) Col Rusty Napier, Nov 12, 2002. Col Napier (then Maj Napier) was the AF Program Element Monitor in the Pentagon during the early 80's.

In the next couple of years the abilities of the US were questioned by the very visible bombing of the Marine Corps barracks in Lebanon that ultimately led to a withdrawal from the country. Following this tragedy, was the encroachment of the Soviet Union in the Western Hemisphere that ultimately led to the belief that the strategic security of the US was being threatened. The result was the United States conducting the successful, but challenging Operation URGENT FURY in Granada.

These events simply provided grist for the mill in supporting the belief by many in Congress that the DoD could not work together to police itself. Therefore, the resulting corrective action now known as the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA) was passed. There were several key aspects of the Act, one of which was to define the legal authority of the CJCS and the unified commanders. However, its practical purpose was much more. It was designed to improve the US warfighting capability, particularly in terms of organizational relationships and responsibilities in the joint environment. GNA designated the CJCS as the principal military advisor to the President and in doing so transferred the responsibilities and functions previously assigned to the JCS to the CJCS. It also created the position of the VCJCS to assist the Chairman, while specifically defined the operational chain of command to run from the President to the Secretary of Defense to the unified and specified commanders. It also increased the role of the CINCs in the resource allocation process.

GNA clearly established the future of joint operations and ultimately paved the way for the resounding success of Operation DESERT SHIELD/STORM. Unfortunately, sixteen years later, it is the last issue above “Increased the role of the CINCs in the resource allocation process” that can be considered as unfinished business. Complicating the issue even more, we are now living in a different environment. An environment that could not be foreseen by GNA:

the end of the Cold War; years of steadily declining military budgets; and some would say the most challenging long term issue of rapidly changing technology and it's impact on both our requirements and acquisition processes.

Chapter 3

The Resource Allocation Process

“Since one can define “affordable” only in relation to the total budget, the solution lies not in acquisition reform but in improving the resource-allocation process. Our entire culture focuses on stovepiped portions of resource allocation, producing a system that sometimes encourages self-serving resource allocation behaviors instead of a cross-functional capabilities approach.

— Aerospace Power Journal, Winter 2001⁴³

The GNA unfinished business of resource allocation, our historic Achilles’ heel, is more important now than ever before to ensure the DoD is structured to handle the demands of the 21st century. GNA attempted to address the issue, but unfortunately, it fell short in its attempt when it became easier to work on the fringes instead of making the hard choices that often need to be made. It was easier because many believe the application of the processes allowed for the easier choices to be made.⁴⁴ So, what are the hard choices with the Resource Allocation Process and why are they so difficult? To answer this question, we must first look at the process (Figure 1).

⁴³ Stephen R. Lorenz, James A. Hubert, Keith H. Maxwell, “Linking Resource Allocation to Performance Management and Strategic Planning-An Air Force Challenge”, *Aerospace Power Journal*, Winter 2001, p.3.

⁴⁴ Interview with USAF Lt Col Brian Dougherty, SAF/AQQU, September 26, 2002. Lt Col Dougherty was the AF PEM for the C-130J program and routinely worked all three parts of the resource allocation process to including routine interface with the JROC.

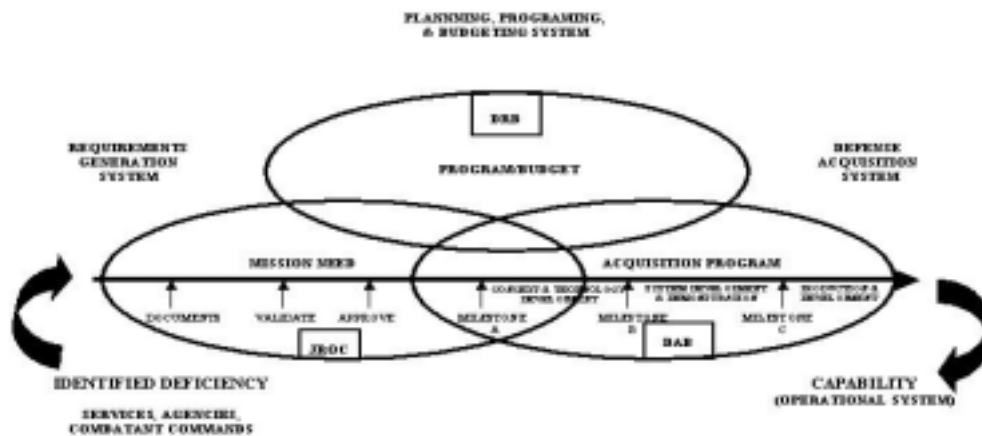


Figure 1. The Resource Allocation Process

The Resource Allocation Process is made up of three separate, but equal systems: the Requirements Generation System; the Planning, Programming, and Budget System (PPBS); and the Acquisitions Systems. Requirements are the cornerstone of everything the Department of Defense accomplishes. Because of this, these three systems are designed to ensure the requirement actually makes it to the user. However, of these separate but equal systems, the Requirements Generation System (RGS) is arguably truly the “First among Equals”. The RGS is the entry point for the system of systems since without a requirement there is no need to program dollars for the requirement (since it does not exist), or to acquire what has been programmed or required. Understanding what the real requirement is not only is a prerequisite to properly execute the other two processes, but also is essential to develop adequate justification for the annual Congressional oversight that occurs each year with the President’s Budget. The next few paragraphs discuss each system of the Resource Allocation Process.

The Requirements Generation System

The Requirements Generation System (RGS) is the first of the three systems within the Resource Allocation Process. The RGS is an all-inclusive system that is primarily uses the Joint Strategic Planning System (JSPS) as the primary vehicle the CJCS uses to discharge his Congressionally mandated responsibilities. The JSPS is an in-depth and thorough system with numerous inputs. However, regardless of the inputs into the JSPS, ultimately the outputs are the requirements and these requirements will flow into the Joint Requirements Oversight Council (JROC). Because of this, this discussion will focus on the JROC, and while not actually part of the JSPS, the JROC (and JWCA) is the primary vehicle used to support the JSPS.

The Requirements Generation Process is the foundation of the Department of Defense, then the JROC is the cornerstone of this process. The JROC is an offspring of the Goldwater-Nichols Defense Reorganization Act of 1986 and it is designed to address the resource allocation issue and correct shortfalls found in managing the defense budget.

Joint Requirements And Management Board (JRMB)

After the high visible failures of EAGLE CLAW and the bombing of the Marine Corps barracks during the early 80's the SECDEF directed the Defense Science Board to review the requirements process. These reviews led to the Defense Science Board to release a study stating that requirements needed to be looked at through a joint set of eyes. As a response to this study, the JCS chartered the Joint Requirements and Management Board (JRMB) in 1984. The JRMB was comprised of the Vice Chief of each of the four military services with the Director of the Joint Staff as chairman. The purpose of this board was to "... provide for early linkup with the front end of the acquisition process in order to review potential system new starts for

determination of joint program feasibility.”⁴⁵ Additionally, to provide greater visibility into the needs of defense management in its entirety, President Reagan established the Packard Commission in July 1985 to study “the budget process, the procurement system, legislative oversight, and the organizational and operational arrangements, both formal and informal, among the Office of the Secretary of Defense, the Organization of the Joint Chiefs of Staff, the Unified and Specified Command system, the Military Departments, and the Congress”.⁴⁶

Historically, the Service Chiefs solely determined the operational requirements and the Commission did not believe that the CINCs (now called Combatant Commanders) requirements were represented in the current requirement generation processes as well as they should be. They highlighted that no “one uniformed officer” was responsible for integrating the views and needs of the CINCs and the Service Chiefs and that the “views of the CINCs must be more strongly and purposefully represented than they are at present within the councils of the Joint Chiefs and in weapons requirements decision-making.”⁴⁷

As an attempt to resolve the “lack of hearing the CINCs voice” dilemma in the requirement process, the Commission recommended increasing the CJSC responsibilities to include representing the CINCs operational requirements. This was not, however another hollow attempt to push more requirements into a particular area without the traditional manpower to go along with it. In fact, the Commission recommended a new position--a first-ever Vice Chairman of the Joint Chiefs of Staff (VCJSC) to assist the Chairman in fulfilling these new duties. It was

⁴⁵ JCS Joint Secretariat, “Charter for the Joint Requirements and Management Board”, March 20, 1984.

⁴⁶ President’s Blue Ribbon Commission on Defense Management, David Packard, Chairman, “An Interim Report to the President,” (Washington D.C.: GPO, February 28, 1986, p. 1.

⁴⁷ Ibid, p. 9.

believed that the person filling this role would be better able to assist the Chairman in carrying out an objective and impartial role of integrating the CINCs requirements with the services.⁴⁸

Another responsibility of the VCJCS would be to review the requirements for new weapon systems and that these responsibilities would be discharged through a revamped JRMB. Under this revamped system, the VCJCS would review all programs, not just joint programs and would ensure a fair balance between programmatic and operational warfighter requirements. Assisting the VCJSC would be the Under Secretary of Defense for Acquisition, Technology & Logistics USD(AT&L), another new position recommended by the Commission. The USD(AT&L) would be the full time Defense Acquisition Executive and would set not only policy, but would supervise the entire acquisition system, to include both the Research and Development (R&D) and Procurement portions.

These recommendations were accepted and incorporated into the Goldwater-Nichols Defense Reorganization Act of 1986 (GNA). In addition to naming the Chairman as the principal military advisor to the President, GNA also gave the Chairman significant additional responsibilities. These included assessing the military requirements for acquisition programs; advising the secretary on the extent to which program recommendations and budget proposals conformed with the priorities established in strategic plans; and finally directed the submission of alternative program recommendations and budget proposals within projected resource levels and guidance.⁴⁹

⁴⁸ President's Blue Ribbon Commission on Defense Management, David Packard, Chairman, "A Quest for Excellence: Final Report to the President," (Washington D.C.:GPO, 1986.53.

⁴⁹ Title X, U.S. Code, sec. 153, section A (4)

JROC Stands Up

In the implementation of the GNA the responsibilities of the VCJCS continued to evolve, as did the vehicle for discharging his duties. Once the JRMB took on a much broader role in developing both planning and acquisition, the Secretary of Defense and the CJCS formed the Joint Requirements Oversight Council (JROC) to assume the JRMB's role. This new body, required by Section 181 (b) of Title 10, was designed to assist the CJCS by identifying and assessing the priority of joint military requirements; by considering alternatives to any acquisition program that has been identified to meet military requirements; and by assigning joint priority to both existing and future programs that meet valid requirements. In addition to forming the JROC, the old JRMB was restructured and renamed the Defense Acquisition Board (DAB) with the USD (A) as its chair. The Department of Defense now had in place a system for not only validating the operational requirements, but a system to set policy and validate the overall acquisition process.

The idea of having the Vice Chiefs sitting on the JROC seemed like a good way of ensuring jointness, but there was one major fallacy in this organizational concept. As the new JROC began to mature, its focus became primarily on review and validation of requirements and acquisition systems. Ordinarily one would think that this is what should be happening. However, since each and every service routinely has at least one major acquisition system, the Vice Chiefs would not want to make any decisions that could hurt their own services programs, so what was supposed to be a process designed to consider the jointness of programs had evolved into a consensus making body. This was business as usual, just as it had been with the JCS decision process. However, this changed with the arrival of Admiral William A. Owens.

Owens And The JWCA

Admiral William A. Owens assumed the position of Vice Chairman, Joint Chiefs of Staff on March 1, 1994, and what separated Admiral Owens from the rest of his contemporaries was the simple fact that he truly understood the Planning, Programming, and Budgeting System (PPBS). The PPBS, the system put into place in 1962 by then Secretary of Defense, Robert McNamara, had become increasingly complex over the years, especially with Congress adding their influence through the appropriation and authorization processes. Many in the DoD either did not understand the intricacies of this complex system or claimed to not understand the PPBS. Still others would say the PPBS was just plain obsolete.

Admiral Owens was different. Owens served both as an Action Officer in N-8 on the CNO's staff, and as Deputy CNO for Resources, Warfare Requirements and Assessments. When combined with the experience he gained as Executive Assistant for Secretary of Defense Dick Cheney's, it is understandable that his experience in both the Pentagon and Washington enabled him to mold his new position into the way the civilian leadership had intended with the passing of Goldwater-Nichols. He understood this process and recognized both its promise and its growing deficiencies in producing a well directed, thoroughly reviewed, and tightly integrated output.⁵⁰ He also understood that one of the requirements of GNA was to ensure the interest and requirements of the CINCs were considered in the requirements process.

To mold the JROC into the oversight council he believed it should be, Owens drastically changed the JROC's culture by increasing the frequency and length of the JROC sessions. This was significant because what had been a somewhat 'as required' schedule, Owens expected

⁵⁰ M. Thomas Davis, "The JROC: Doing What? Going Where?", *National Securities Studies Quarterly*, Center for Peace and Security Studies of the Edmund A. Walsh School of Foreign Service, Georgetown University, Summer, 1998. p. 4.

formally scheduled meetings to be held twice a week. He also revised the JROC agenda to be much more aggressive than simply focusing on requirements and acquisition programs and he informed the CINCs that the JROC would be working closely with them to serve both as their vehicle for inputting requirements and priorities, and as their voice for articulating their needs. Finally, Owens created a new structure within the Joint Staff to assess requirements. This new structure, the Joint Warfare Capabilities Assessment (JWCA) team, represented by the functional areas within the Joint Staff, would look at modern warfighting and then break it down into nine functional areas with the sole purpose to determine the warfighting capabilities required for each area.⁵¹ Admiral Owens believed the JWCA would shift the focus from the interservice rivalries (which continued to surface despite numerous attempts throughout the years to make the services police themselves) to a new joint focus. According to Admiral Owens:

We have created nine assessment areas, charged separate elements of the Joint Staff with coordinating each assessment, and invited participation from a wide range of agencies. Matrices compel interaction across organizations; they engage people who do not normally talk to each other and enhance a horizontal flow of ideas. When this happens, new insights, innovation, and intellectual synergy often spark conceptual breakthroughs and leaps in problem solving.⁵²

In simple terms, the JWCA is made up of teams of warfighting and functional area experts conduct the assessments assigned by the JROC, and while the overall number of assessment teams have increased and subsequently decreased over the years, the current structure is as follows:

⁵¹ Ibid, p. 5.

⁵² Quoted from William J. Toto, "It's Broken! Fix It!" *Armed Forces Journal International*, April 1996. p.30

CURRENT JWCA ORGANIZATION

NEW RIBBONS BASED ON JV 2020 TENANTS AND JOINT MISSION AREAS

- ORGANIZED ACROSS SERVICE/AGENCY LINES
- FOCUSED ON WARFIGHTING ISSUES / CAPABILITIES
- HELPS INTEGRATE REQUIREMENTS AND ARCHITECTURES

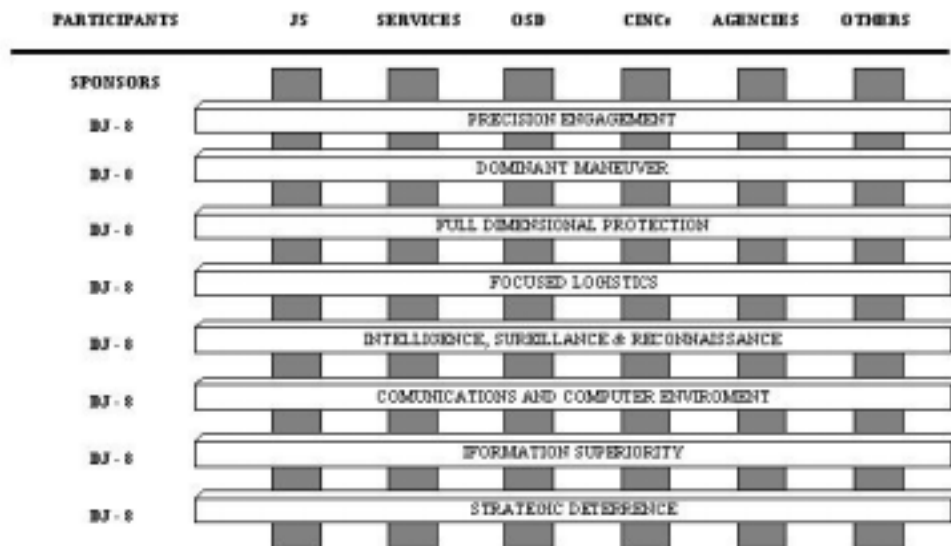


Figure 2. JWCA ORGANIZATION

The JWCA teams are composed of personnel from the Joint Staff, unified commands, services, Office of the Secretary of Defense (OSD), DoD agencies, and others as required. A Joint Staff director sponsors each team. These assessment teams provide the analyses that underpin the JRB and JROC decisions and recommendations. Every year, the JWCA travels to each CINC to brief the results of the JROC and to solicit inputs and recommendations for the JROC. This ensured the CINC's voice was being heard.

Now, 22 years later, just as Secretary of Defense McNamara had developed a method for reviewing the defense budget using analytical means, Admiral Owens had accomplished the

same feat for analyzing the departments' requirements. He now had the means to counter the individual service arguments for requirements. In fact, when its charter was revised (which codified the expanded responsibilities) many believed this would result in a much fuller integration of the overall defense program and a strengthening of the relationship to defense planning.⁵³ Unfortunately, the first major opportunity to validate this concept failed. In 1996, the Commission on Roles and Missions (CORM) failed to make the hard choices, and except for a few minor adjustments, followed a status quo philosophy. The JROC had the opportunity to provide the needed direction and expectations, but instead offered only an implied consensus.

The remaining years of the Clinton Administration remained uneventful except for the subtle change in focus for the JROC. As the military continued its draw down, infrastructure became the new focus and as a result, a consensus mindset took root within the JROC and the council reverted to an operational requirements documents (ORDs) validation council of consensus and log rolling.

Pace And Transition

The Bush Administration came to Washington with a message for change and none in the administration was more vocal about the need to look toward the future than the new Secretary of Defense, Donald Rumsfeld. On June 25, 2001, the SECDEF stated, "The Defense establishment is tangled in its anchor chain. To manage DoD efficiently we must transform the Department—how it operates internally, how it deals with its industrial suppliers, and how it interacts with Congress." *Transformation* has now become the new buzzword in the DoD and the burden of making this happen falls to the new VCJCS, General Peter Pace.

⁵³ M. Thomas Davis, "The JROC: Doing What? Going Where?".

General Pace was appointed the VCJCS on September 1, 2001 and along with this appointment, came the responsibility of transforming the Department for the challenges of the 21st century. Pace believes transformation begins with transforming the JROC by having it look more toward the future. During his October 17, 2002 speech at the Institute for Foreign Policy Analysis-Fletcher national security conference, General Pace said, “We’re good right now at grading other people’s homework...but we’re not as proficient at making the services understand what is needed for the future.”⁵⁴ Now, as we look toward the 21st century and the demands of asymmetrical warfare, ensuring this is the central focal point and working as efficiently as possible is an absolute must. The verdict is still out on how the JROC will transform itself, but one thing is certain. If successful, the transformation of the JROC will be as revolutionary as Admiral Owens’ approach with the JWCA.

JROC Membership

The JROC is not officially part of the Joint Strategic Planning System (JSPS), but the JROC and the JWCA are closely tied to and supports the JSPS. In fact, it not only support the JSPS, but it also supports the Requirements Generation System, the Planning, Programming, and Budgeting System, and the Defense Acquisition System, as well. Title 10, Subtitle A, Part 1, Chapter 7, Section 181, lays out the actual statutory requirements for the composition of the JROC which is necessary to support each of these functions. The five designated positions are the CJCS, who is the chairman of the Council, and a Flag/General Officer from the Army, Air Force, Navy and the Marine Corps.⁵⁵ However, the position of the Chairman of the Council position may only be delegated to the VCJCS and as a result, has evolved into actual practice,

⁵⁴ Dan Caterinicchia, “Changes coming at the JROC”, *FCW.com*, October 18, 2002, p.2.
<http://www.fcw.com/articles/2002/1014/web-jroc-10-18-02.asp>

⁵⁵ Title 10 Subtitle A, Part 1, Chapter 7, Section 181, pp.1-2.

along with designating the Vice Chiefs of each service as the admiral and general officers, required by Title 10. The current composition of the JROC is show below:⁵⁶

JOINT REQUIREMENTS OVERSIGHT COUNCIL	
CHAIRMAN	Vice Chairman of the Joint Chiefs of Staff
EXECUTIVE SECRETARY	Director, J-8 (Force Structure, Resources & Assessments Directorate)
MEMBERS	Vice Chief of Staff of the Air Force
	Vice Chief of Staff of the Army
	Vice Chief of Naval Operations
	Assistant Commandant of the Marine Corps

Figure 3. Current JROC Membership

In addition to the statutory requirements for the JROC membership, the Chairman published Chairman Joint Chief of Staff Instruction (CJCSI) 5123.01A, which identifies additional individuals who from time to time can provide advisory support to the JROC. These individuals are the CINCs, the Assistants to the Chairman for Reserve and National Guard matters, the J-2 for intelligence support, the J-6 for certification for joint interoperability issues, the Joint Staff directorates who may have functional ownership of an issue, along with any additional organizations the Chairman deems appropriate.⁵⁷

In addition to the JROC and the JWCA, there are three additional Department of Defense bodies that were established and organized to support the Chairman in executing his Title 10 responsibilities. These bodies are the Joint Requirements Board, the Enhanced Joint Requirements Board, and the Joint Requirements Panel.

⁵⁶ “CJCS, Charter of the Joint Requirements Oversight Council,” CJCSI 5123.01A, Washington DC: 8 March 2001. p. A-2.

⁵⁷ Ibid. p. A-2-A-3.

Joint Requirements Board

The Joint Requirements Board (JRB) is a subordinate organization of the JROC and is composed of flag and general officers from each of the services. The JRB members are normally officers who are involved with the services' requirement processes. The JROC Secretary chairs the JRB. The JROC established the JRB and codified it in the JROC Charter to support the JROC by overseeing and integrating the JWCA process and shaping and honing the topics and issues that require JROC attention.⁵⁸

Enhanced Joint Requirements Board

The Enhanced Joint Requirements Board (EJRB) is a special advisory body to the Deputy Secretary of Defense and the Vice Chairman and is co-chaired by the JROC Secretary and a representative from USD (AT&L). Other members of the EJRB are the JRB principals from each of the Services and designated representatives from USD (Comptroller), USD (Policy), DoD General Council, ASD Command, Control, and Communications (C3I), and DoD CIO. The Chief of the JROC Secretariat Branch attends EJRB sessions as the recorder. Board facilitation is handled through the OSD Special Access Program Coordination Office and J-8/JRB. The EJRB conducts executive-level review of selected programs and developments and provides recommendations to senior DoD leadership through the appropriate channels.⁵⁹

The Joint Requirements Panel

The Joint Requirements Panel (JRP) is chaired by the J-8, Deputy Director for Resources and Requirements (J-8/DDRR). The remaining JRP membership is comprised of senior nongeneral/flag officers from each of the Services (normally the Service JROC POC), designated by the JROC permanent member of the Service concerned, as well as the J-8/JRD Chief and a

⁵⁸ Ibid.p.A-8.

representative from DIA/Joint Staff (J-2). The purpose of the JRP is to assist the JRB and JROC in carrying out its duties.⁶⁰

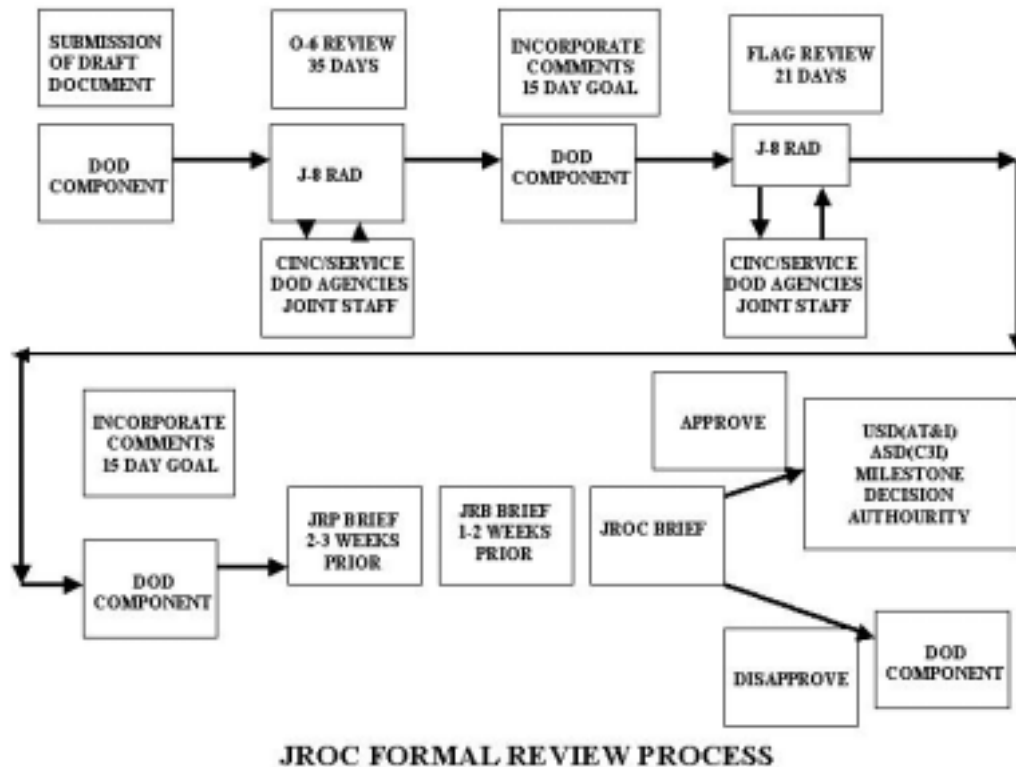


Figure 4. The JROC Formal Review Process

PLANNING, PROGRAMMING, AND BUDGET SYSTEM

“The ultimate objective of the DoD PPBS is to provide the best mix of forces, equipment, and support attainable within fiscal constraints.”

DoD Directive 7045.17

⁵⁹ Ibid.p.A-9.

⁶⁰ Ibid.

As stated earlier, the planning, programming, and budget system (PPBS) was a system designed at the direction of then SECDEF McNamara to assist in making choices about the allocation of resources among a number of competing programs. Officially it was to provide a more thorough, analytical, and systematic way for the administration to make critical independent national security decisions with particular reference to force structure, weapon systems, and costs.⁶¹ In simple terms, the purpose of the PPBS is to allocate resources within the Department of Defense ensuring the maximum amount of national security is provided to the taxpayer within the dollars allocated.

The PPBS is a cyclic and iterative process made up of three distinct but interrelated phases: planning, programming, and budgeting. It lays out the framework which allows for decision-making on future requirements by providing an opportunity to reexamine previous decisions from the advantage of hind sight (i.e. changing threats, technology, political environment, economic environment). This is extremely important. In every budget cycle there are more requirements than dollars available and this framework is designed to ensure the best mix of resources within the fiscal constraints.

The strength of the PPBS is found in the Future Years Defense Program (FYDP) which is a computerized database that summarizes all resources, forces, and equipment associated with programs approved by the SECDEF. This information is kept for the prior year, current year, and the budget year, along with the four additional future years (commonly referred to as the outyears). Combined with this data is the force structure information for an additional three years that allows for ease in planning for the future. It is looked at from a three dimensional

⁶¹ Roger R. Trask and Alfred Goldberg, p.34.

perspective, categorized into eleven different Major Force Programs (MFPs). These MFPs reflect a macro-level view of DoD missions and contains the required resources for those plans.

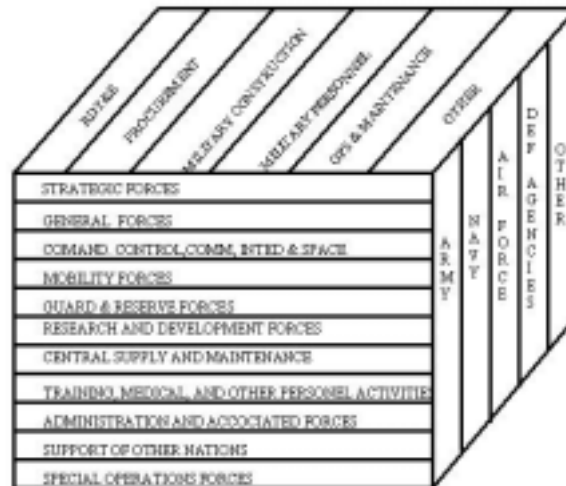


Figure 5. Future Years Defense Program (FYDP)

PPBS Phases

In theory, the three phases (Planning, Programming, and budgeting) along with the requisite inputs for each phase are listed below in Figure 5.

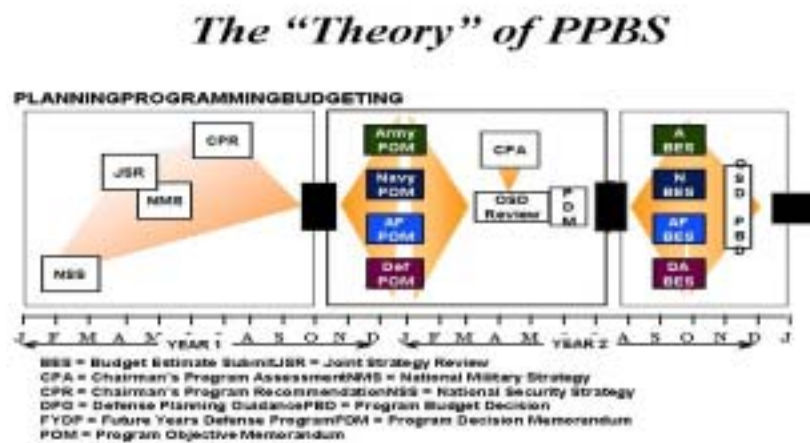


Figure 6. Theory of PPBS⁶²

Planning Phase

The first step of the PPBS is the Planning Phase. It normally begins about three years prior to the fiscal year where budget authority will be requested and ends with issuing the Defense Planning Guidance. The focus is on defining the national military strategy necessary to help maintain national security and support U.S. foreign policy 2 to 7 years in the future. Once defined, the planning begins to integrate and balanced the military forces necessary to accomplish this strategy. This integration ensures the necessary framework (including priorities) to manage DoD resources effectively is consistent with our national resources limitations that ultimately lead to providing the decisions in the formulation of national security policy and related decisions.⁶³

Previous guidance is the first activity to be reviewed. The National Military Strategy is reviewed to determine the evolution of threats along with the evolution of military strategy. Likewise, the Joint Planning Document is reviewed to determine the priorities and requirements. Additionally, the JROC, supported by the JWCA, is used to provide the Chairman's Program Recommendations to develop an input to the DPG. The DPG reflects the National Security Strategy and provides guidance to the services to be used for planning peacetime, wartime, or crises strategies. In support of the DPG, the Office of Management and Budget (OMB) issues fiscal guidance to the services to be used in the development of their Program Objectives Memorandum (POM). Draft DPGs are issued around March with the final version being issued in April or May.

⁶² M. Thomas Davis, "Understanding the Defense Strategic Planning Process," PPBS Evaluation Project, *Business Executives for National Security*, 2001

⁶³ "Department of Defense Directive Number 7045.14," May 22, 1984, Change 1, July 28, 1990, p.2.

Programming Phase

The next step in the PPBS is the Programming Phase. The purpose of this phase is to translate the fiscal guidance (whether, OSD, Congressional, or Services), information, and decisions of the Planning phase (forwarded in the DPG), into a 6-year proposal called the Future Years Defense Plan (FYDP). In the FYDP, the challenge each service faces is to apply their fiscal guidance to a non-fiscally constrained guidance articulated in the DPG. In simple terms, the services develop their POMs that details how they wish to allocate their dollars.

Once the POMs are submitted, the Joint Staff “shall analyze the programs and provide a risk assessment based on the capability of the composite force level and support program for the U.S. Armed forces to execute the strategy approved during the planning phase. A program review is conducted; the results are issued in Program Decision Memoranda (PDMs).⁶⁴ The end result of the PDMs tells what the DoD can afford vice what the DoD needs. This is the key point in this phase because it is where over the years the process has tended to drift from the original intent. The challenge has been to separate “needs” from “wants”. Too many times in the past, the needs were defined by who was better at articulating the requirement. However, regardless of the needs vs. wants question, the decisions made in the PDMs start the beginning of the final phase-The Budgeting Phase.

Budgeting Phase

The final phase of the PPBS is the Budgeting Phase. In this phase, the OSD comptroller takes the POMs and reviews the first two years considering any fact-of-life issues that could

⁶⁴ “Department of Defense Directive Number 7045.14,” May 22, 1984, Change 1, July 28, 1990, p.3.

impact the programs. Since it is already known from the Programming phase what the needs (vice wants) are, the overall purpose of this phase is to ensure that these needs are executable and will best accomplish the needs of the services. Once the budget reviews are complete, the results are issued in Program Budget Decisions (PBDs). The services have one chance to reclama any PBDs but once resolved, the SECDEF submits the DoD portion of the President's Budget. The President's Budget actually does two things. First it lays out how the DoD wants to spend its money. Second, the budget is a request for Congress to appropriate the funds and grant required budget authority to execute the plan.

The More Things Change, The More Things Stay The Same

Even though this process has changed some over the years, the basic structure has remained basically the same. It was, however a process that was intended to be a two-year cycle and there have been numerous efforts to make it a biennial process. Unfortunately, Congress has been very reluctant to go to two years, preferring an annual budget from the DoD. This results in issuing a POM cycle in the even years, and an Adjusted POM (A-POM) during the odd years. Congressional staffers much prefer this method since they are primarily concerned with the budget phase and an annual submission provides them a much-needed insight into a very complex system.

Regardless if the PPBS went to a two-year cycle, many believe it still doesn't function as it should. If functioning as intended, the PPBS would perform as the department's strategic planning process, the resource allocation process, the program integration process, and finally the budget formulation process. After identifying and analyzing mission shortfalls and duplications, these processes would suggest alternatives for minimizing or eliminating them.

Once complete, the process would produce an annual budget for presentation to the Congress linking missions to requested funding.⁶⁵

In short, the PPBS is a well-structured process. However, with the exception of President's Budget, there are not any statutory deadlines for completions of the PPBS phases. These deadlines are determined by policy and routinely become a moving deadline. If applied correctly, the PPBS could and would provide the requisite analysis required by the DoD. Unfortunately, the DPG is not released until June, and the services POMs are due in August. Thus, there is not enough time allocated for a planning phase for the services. In fact, the late delivery forces the services to simply review, adjust, and update the previous years POM. When submitting the POM under these conditions, the services are forced to provide a slide stating "What DPG guidance we did not meet". The reality process is depicted in Figure 6.

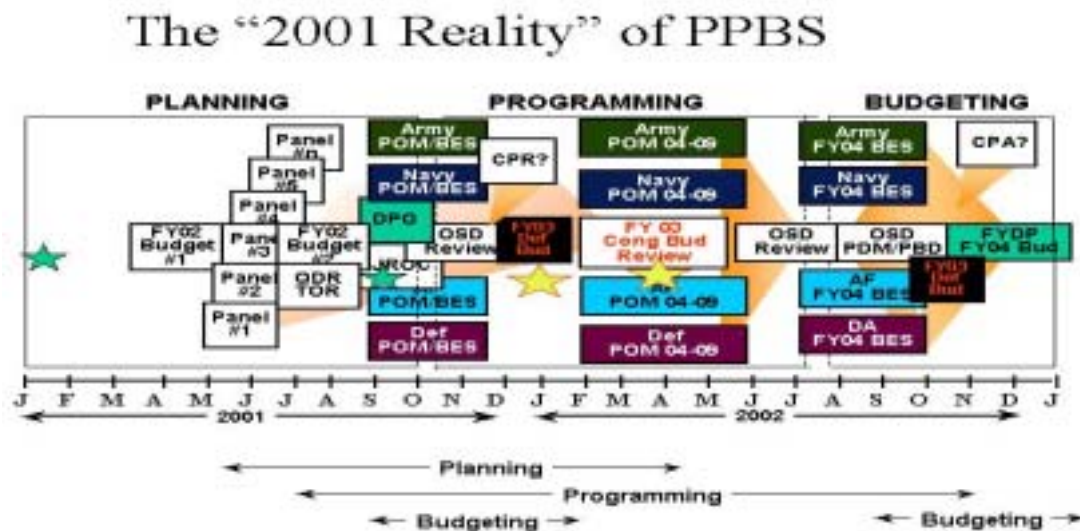


Figure 7. The Reality of PPBS⁶⁶

⁶⁵ "Framing the Problem of the PPBS", *BENS Tooth-to-Tail Commission on the US Department of Defense's Planning, Programming and Budgeting System (PPBS) Special Report*, January 2000, p.4.

⁶⁶ Ibid. M.Thomas Davis.

ACQUISITION MANAGEMENT SYSTEM

The primary objective of the defense acquisition system is to acquire quality products that satisfy user needs with measurable improvements to mission accomplishment and operational support, in a timely manner, and at a fair and reasonable price.

DoD Directive 5000.1⁶⁷

The third system used in determining Resource Allocation for the Department of Defense is the Acquisition Management System (AMS). This system exists to acquire and sustain the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy. Along with the Requirements Generation System and the PPBS, the AMS is highly interactive and complex and there have been numerous changes and adjustments to the process over the years. However, these changes and adjustments have not impacted the five overarching principles of the AMS. These principles defined as centralized policy/direction and decentralized execution; use of prototypes and operational test and evaluation for a better understanding of the technical challenges to minimize risk prior to making a production commitment; minimize the number of management levels; minimize reporting requirements; program stability have remained relatively constant and are considered to be somewhat sacrosanct.

⁶⁷ "Department of Defense, The Defense Acquisition System, DoDD 5000.1," Ch-1, Washington, D.C., January 4, 2001, p.12.

In general terms, the AMS is a management process the Department of Defense uses to translate the broadly stated needs of the user (once approved by the JROC) along with technological opportunities into reliable and sustainable systems that provide capabilities to the user. Not every acquisition program is the same, and due to different influences on the programs (priority, maturity of technology, labor costs, Congressional oversight, etc), not every program manager will follow the exact same process. However, they do try to follow the process as much as possible. This process, defined in DoDD 5000.1 as the “Defense Acquisition System”, directs the policies and principles for all DoD acquisition programs. An acquisition program in the DoD is one that has been both validated through the requirements process and is also a funded effort (every service has numerous validated, but unfunded programs) designed to provide a new, improved, or continuing capability in response to a need.

The two primary paths to enter this acquisition cycle are 1) the determination and documentation of a mission need and the decision to act on that mission need at a Milestone A decision followed by a Concept Exploration and/or Component Advanced Development and 2) a technological opportunity demonstrated in the form of an Advanced Technology Demonstration, an Advanced Concept Technology Demonstration, or a joint or service-specific Experiment resulting in a Milestone A, B, or C decision.

These activities and entry paths will fall into one of three different Acquisition phases: Concept and Technology Development, System Development and Demonstration, and Production and Development. Prior to entering each phase, a Milestone decision must be made by the Milestone Decision Authority (MDA). The MDA will review the program, threat projections, system performance, unit costs, life-cycle costs, acquisition strategy, and any

additional information he feels will be required to make a fair and accurate decision necessary to move the program into the next phase.

The acquisition system is organized into three general activities with multiple paths into and out of each activity as shown in Figure 7.

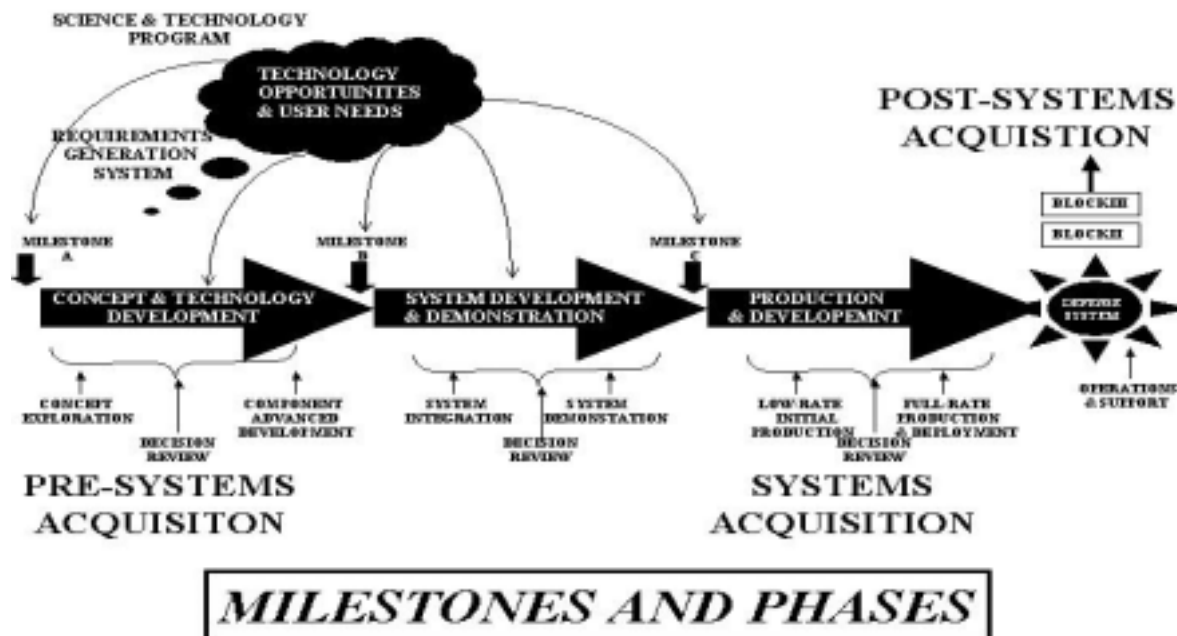


Figure 8. Acquisition System Milestones and Phases

These activities are the Pre-Systems Acquisition activity which focuses on research and development (R&D) and procurement of technology; the Systems Acquisition activity where technologies are developed into systems which are then demonstrated, produced and delivered; and finally the Post-System Acquisition activity where systems are disposed after they have reached the end of their operational life.⁶⁸

⁶⁸ "Department of Defense, Operation of the Defense Acquisition System, DoDI 5000.2," Ch-1, Washington, D.C., April 5, 2002, p.4.

ACTIVITIES

Pre-System Acquisition Activity

Pre-system acquisition is simply the fact-gathering phase. Once the requirement is identified and validated, the pre-system acquisition begins. If it has been determined that a non-material solution to the requirement is not available, then a material solution is sought by the identification and development of the user needs, searching for the development of technological opportunities, and selection of concepts and technology to develop a material solution. The entry point, along with the acquisition point, is determined by the maturity of the technologies and the users employment concept combined with evaluation of currently available commercial options. The information gathered is now presented to the MDS to conduct a Milestone A review to determine if a concept study is warranted.

Concept And Technology Development Phase

The entrance criteria for this phase are a validated and approved mission needs statement and completion of the market research. At Milestone A, approval can lead to either the Concept Exploration (CE) or Component Advanced Development (CAD) Phase. Determining which of the two is appropriate or if multiple concepts are appropriate, the CE phase would be selected. However, if only one particular concept is selected, but may need some additional work, then it would go into the CAD phase.

System Acquisition Activity

System Acquisition is the process of developing the concepts into not only a producible, but also a deployable product that will provide the capability to the user. This development is based on an Analysis of Alternatives (AoA) that outlines the most effective method for satisfying the need. If the system already exists, then one would expect that it would be cheaper to simply

modify the existing system to meet the users needs. However, this is not always the case. Using the AoA, the decisions are made based on many factors. These factors could be if either commercially domestic or international technologies/systems or the possibility of additional production of previously developed U.S. or Allied systems available. Additionally, if a cooperative development program with one or more Allied nations is already in place then the possibility exists to meet the requirement through these means. Likewise, sometimes a new joint Component or agency development program may also provide a solution. Finally, if none of these options are available then the only solution would be to follow a new Component-unique development system.⁶⁹

System Development And Demonstration Phase

The primary purpose of the System Development and Demonstration Phase is to develop a working system while reducing the development risk and ensuring the system is affordable, integrated, interoperable, and useful. The entrance criteria into this phase depend on the level of program maturity, the validated requirements and program affordability. Normally, the maturity of the technology will determine the path to be followed and the technology must have been demonstrated in the relevant environment. The entrance for this phase is Milestone B.

The MDA will review relevant program information to include the approved Operational Requirements Document (ORD), an independent technology assessment, the threat assessment, the AoA, and test and evaluation results, the affordability, the acquisition strategy, the Program Protection Plan, a Test & Evaluation Master Plan (TEMP), and a C4I Support Plan.⁷⁰ Additionally, the MDA will approve the acquisition strategy that will include the exit criteria for

⁶⁹ Interview with Lt Col Brian Dougherty on January 27, 2003.

⁷⁰ Ibid, DoDI 5000.2, Enclosure 3, Tables 1 and 2, pp.43-44.

this phase. In order to approve the Acquisition Strategy, the MDA must define the approach that will be pursued to achieve the full capability documented in the ORD.

The program enters the System Integration step if it has a completed system architecture even though the integration of the subsystems is not yet complete. It will exit System Integration when it has demonstrated a working prototype, the configuration has been documented, and the MDA either determines the program should move forward, or terminate.

Chapter 4

Recommendations

We enjoy peace amid paradox. Yes, we're safer now from the threat of massive nuclear war than at any point since the dawn of the atomic age, and yet we're more vulnerable now to suitcase bombs, the cyber-terrorist, the raw and random violence of the outlaw regime.

Make no mistake. Keeping America safe in such a world is a challenge that's well within our reach, provided we work now and we work together to shape budgets, programs, strategies and force structure to meet threats we face and those that are emerging, and also to meet the opportunities we're offered to contribute to peace, stability and freedom. But the changes we make in our defense posture, the innovations we introduce, take time to be made part of a great military force. We need to get about the business of making these changes now in order to remain strong, not just in this decade, but in decades to come.⁷¹

— Donald H. Rumsfeld, Secretary of Defense

The Goldwater-Nichols Defense Reorganization Act of 1986 (GNA) gave the Chairman a significant amount of additional responsibilities for assessing the military requirements to include acquisition programs, advising the secretary on the extent to which program recommendations and budget proposals conformed with the priorities established in strategic plans, and submitting “alternative program recommendations and budget proposals within projected resource levels and guidance...”⁷² And while most experts agree that GNA was a resounding success in the area of joint organization and command and control, it is the resource allocation area where there is some unfinished business. Attempts were made in the mid-90's with the Commission on Roles and Missions (CORM), but it quickly fell into the “too-hard to do” box.

⁷¹ Donald H. Rumsfeld, January 26, 2001 remarks delivered during his official welcoming ceremony at the Pentagon, Washington D.C.

In Washington D.C., dollars and power come in finite quantities and giving up one means the loss of the other (and thus an increase for someone else). This was evident when one of the overarching results of the CORM was to simply address issues on the fringe and not take on the real substantial issues. The DoD's Achilles' heel had not only raised its head, but continued to show that the services were unable to police themselves.

Now, as we enter the 21st Century, the Department of Defense must come to grips with fundamentally reforming Resource Allocation and, or risk allowing the Department to become bankrupt within the not too distant future. It is time to break the paradigm where service funding is (roughly) equally divided among the three Departments and make hard decisions. If the ratio shifts to, then so be it-if it makes the most sense in supporting the national strategy.

Fundamentally, everything must be placed on the table (not just weapon systems) and the JROC must make the top down decisions, hard as they may be to make.

Currently, 50 percent of the budget goes to infrastructure and 50 percent to the forces.⁷³ In this day of both discount houses and medical clinics around most corners in the local neighborhoods, simple logic tells you that much of this infrastructure could and should be privatized. Unfortunately, this is an emotional issue and facts are often overlooked. It is easy to forget that when most of our military bases and posts were built, they were built in areas usually referred to as the "outskirts" of the population centers. Commissaries and PX/BX services were provided, not only to help offset the low pay of the troops, but also as a convenience for shopping due to either the lack of transportation available or the distance required to travel for

⁷² "Title X, U.S. Code, sec. 153, section A (4)"

⁷³ Interview with MGen Arnold L. Punaro, USMC, February 10, 2003. MGen Punaro is currently consulting the DoD to identify and develop recommended solutions to correcting perceived problems associated with the PPBS. The BENS Tooth-To-Tail study suggests that the ratio is 70%-30%. However, regardless of how the numbers are determined, it clearly reflects an area of concern.

these services. Now, as cities have grown up around most of these installations, the original arguments simply do not hold up. In 2002, the Commissary system was a \$6 billion industry with \$1 billion in losses.⁷⁴ This is \$1 billion that could be used to either upgrade current systems or procure new weapon systems. We've made some gains in the privatization of some areas (i.e. medical, housing, etc), but hardly have touched the surface. We must find ways to reduce our infrastructure cost and adopt world-class business practices where we can, or we will never be able to fund and field the high tech weapons required for the 21st Century. The first place to start is with the Resource Allocation Process.

Recommendations For The JROC

First, the JROC should be restructured both in philosophy and in organization. All requirements should come from the JROC, not to the JROC. The history of the JROC where the services bring forward the requirements only invites a consensus approach. When the current membership is made up of the Vice Service Chiefs who have loyalties to their own service programs, how can one expect that they would vote to cut their own major program? However, there should still be an avenue to bring up issues from the services, but this should be the exception vice the norm.

Second, the Unified Commanders should publish their own Joint CONOPS and submit them to the JROC. Once submitted, the JROC should use these CONOPS when looking across the services in determination of joint applicability and these determinations should drive the agenda of the JROC. It's been said that the Combatant Commanders' vision is too shortsighted and that they are and should be only interested in their term.⁷⁵ There is no doubt that their immediate focus is the "here and now", but it is doubtful that there has ever been a Commander

⁷⁴ Ibid.

who was not concerned about the “tomorrow”. If this were true, then knowing that the current PPBS system it takes as a minimum of 18-24 months to ever see results, why would the Combatant Commanders ever submit their Integrated Priority Lists (IPL) that reflects their requirements? History shows that great Commander’s not only have a long-term vision but want to have it implemented as well. If the Combatant Commanders staffs are not large enough handle this function, then shift manpower from the service staffs to the Combatant Commander’s staffs for their plus ups. This shifting of manpower should lead to an overall change in philosophy by combining the Service Secretary and Service military staffs. There is already a duplication of effort for many of the functions provided by the service and secretary’s staffs, and removing this duplication of effort would allow for the manpower shift to the Combatant Commander’s Staff.

A supporting document to accompany the Joint CONOPS should be the service-specific CONOPS. This would allow the services to protect what they perceive as a service-specific requirement (although the JROC should make this call only after validating that there was not either a joint need or an existing joint capability). There will no doubt be some of these requirements, but as we see the merging of technologies, these lines are becoming more and more blurred.

The third issue for improving the JROC is to change the membership. As previously mentioned, every service has its own major programs and loyalties. The only real way to overcome this service loyalty is to add civilian membership from OSD to the JROC. As a minimum, PA&E and USD AT&L should be added to this joint body. PA&E already provides for an evaluation of the programs during the POM cycle, but being part of the process from the

⁷⁵ Butch Neal, “The JROC: A Return to the Basics”, *National Securities Studies Quarterly*, Winter, 1999, p. 94-100.

beginning, would help to ensure a true joint perspective and minimize the consensus perspective. Likewise, USD AT&L has the ability to look across the services for true jointness in the acquisition world, helping to minimize consensus voting.

Finally, to ensure the services voices are heard, the JROC should change to a two-step corporate board process. The first step is to hold a Board level review of the programs passed down from the JROC. This board is made up of the Vice Service Chiefs and/or the Vice Service Secretaries (similar to that of the current JROC) and ownership should reside in the Joint Staff. Holding this level of review will ensure that service-specific requirements have the opportunity to be vetted prior to final review/decision. JWCA's would still provide the requisite assessments for joint application, and the JRB and JRP could, if determined by the leadership, still play an important role.

The second step is to hold a Council level review for final review/direction. The noticeable change to the membership here is to replace the Vice Service Chiefs with the Deputy Combatant Commanders and to place the ownership under OSD. If civilian oversight is a requisite for our system, then it only make sense that validating and sourcing funds for the requirements come from civilian oversight. It is the civilian component to this equation will ensure that the requirement is truly a "need" and not simple a "want" and thereby eliminating the approval by consensus. In the end, the Deputy Combatant Commanders who have their geographic command's published Joint CONOPS will be able to look at the programs more from a joint perspective as to what they need in their theater of operations. This, when combined with civilian membership will eliminate the parochialism of the Services and will ensure jointness is the first thought, not the last.

Recommendations For The PPBS

The second major recommendation for correcting the Resource Allocation Process is the refocus the PPBS. Many believe that the PPBS is a broke system that has outlived its usefulness.

A clear example of this is from the 1995 CORM where they stated

The current PPBS reexamines the entire multiyear defense program annually, uses too many people, takes too long, goes into too much detail, and leaves little time for reflection and creativity. Restructure the PPBS and other decision support processes to improve integration and provide clearly defined responsibilities for the various participants.⁷⁶

This being said, the real question is this...“Is the PPBS process really broke, or is it just failing to apply the process as it was intended?”

Clearly, the PPBS phases have changed into something that makes the process hard to understand and difficult to manage. The systematic flow has lost much of its flow and the emphases of the individual phases have shifted to different levels of importance. Combine this with the inability to provide a direct link at the conclusion to the process back to the original DPG guidance clearly reflects a process out of sync. There must be a methodical way to bring closure to the overall process, or the process will take on a life of its own and will be defined by individual interpretations.

The first step to regaining control of the process is to correct the Planning Phase. As stated earlier, the 2003 Defense Planning Guidance was not released until mid-June 2002 and the services submit their POMs in late August. This short timeframe makes it extremely difficult to ensure adequate planning in only a few short weeks. Add to this, the multitude of reviews that have been added over the years during the planning phase, and it is easy to begin to see the problem. In 1993 during the Bottom-Up Review, Secretary of Defense Les Aspin did not submit

⁷⁶ “The Report of the Commission on the Roles and Missions of the Armed Forces,” May 24, 1995.

his DPG until September 28 and the POMs were due to OSD the next day. It is no wonder that people say the PPBS is broke.

In order for the services and defense agencies to adequately plan and program, the DPG should be released to the Services no later than January 1st, with draft releases close to around October 1st. This would allow for time to adjust and plan according to actual guidance as opposed to just updating the previous years' program. The DPG should provide clear, unambiguous direction. This is an absolute must to develop a path back from the budget to the DPG.

The next step is to provide a formal review (with enough time to correct deficiencies) for the Programming phase. Once the services and defense agencies submit their POMs they should be reviewed to ensure they actually met DPG intent. Currently, when the POMs are submitted and briefed, a large portion of the briefings are allocated to a "What we did not meet in the DPG" section. If the DPG is properly prepared, and the services and defense agencies properly plan, then this should not be an option. This not only ties back to the responsibility of the JROC validating the services' requirements and providing top-down direction but also continues to build the path back from the budget to the DPG.

The next step is correcting the Budget phase. Currently this is the largest impact to the PPBS process. Because there is not enough time allocated to the Planning phase and the Budget phase is skewed too much to the review side. Correcting the Planning phase and providing proper reviews in the Programming Phase will naturally return the Budget Phase to more of a review phase as it originally was designed.

The final recommendation for the PPBS is to return it to a two-year process as it was originally designed. Unfortunately, Congress works on an annual cycle and the staff members

enjoy having the ability to directly review their pet programs. Combine this with both the Authorizers and the Appropriators each having the opportunity to review and assess the programs, will ensure the PPBS will stay an annual process. Program stability is almost non-existent due to the constant reduction of funds, redirection of assets, or simply delaying of funds due to the requirement of validation reports along the way.

Recommendations For The Acquisition Management System

As stated earlier, ensuring the JROC provided top-down direction in acquisition would be a big step in assisting the acquisition process. Likewise, to returning the PPBS process to a two-year process would help in providing stability to the acquisition process. In its present form, the Acquisition Process is a good process, but more is needed.

The first area of need is in legislation relief. Legislation relief needs to be provided toward the flexibility of funds. The “Color” of money (R&D, Procurement, etc) and the obligation or timeline of money too many times ties the hands of Program Managers and forces either poor decisions no decisions. Flexibility in this area will enhance not only the PPBS process, but also the Acquisition System. As technology continues to advance, Research and Development (R&D) costs and timelines are often times unknown. Leadership needs the flexibility to re-program the “colors” of money from one category to another. Raising the threshold limit on reprogramming authority would be a great help in this area. As it stands right now, a Program Manager of an average size program, an Acquisition Executive, or the Secretary of Defense, all are responsible for different levels of all colors of money, yet all are limited to only a \$10 million reprogramming limit.⁷⁷ Clearly, the SECDEF should have greater authority than the average Program Manager.

⁷⁷ Ibid. Punaro.

Complicating the matter further, R&D money is programmed in 2-year blocks, but due to “recommended” obligation rates (driven by Congress withdrawing funds from one program and placing them toward another), delays are often incurred.⁷⁸ Historically, due to Continuing Resolution Agreements (CRA) resulting in funds not being made available until the second quarter of the fiscal year causes unnecessary turmoil in the acquisition process. Combined this with the fear that Congress will take away the funding if it is not obligated by the start of the fourth quarter, leads to 2-year money actually being 1 to 1 ½ year available money at best.

The next area where the acquisition management system needs adjusting is changing the regulations. The DEPSECDEF has made a great step in the right direction with the revoking of DoDD 5000.1, DoDI 5000.2, and DoD 5000.2-R by stating that the intent of new guidance...“is to rapidly deliver affordable, sustainable capability to the warfighter that meets the war fighter’s needs.”⁷⁹ The results of the issuance of replacement guidance are too early to tell, but there are already positive signs.

In addition to replacing guidance, there needs to be an overall change in philosophy. Too many times there is what can be defined as a “Not Invented Here” mindset. The Program Offices, while having program authority, have evolved into an “Institutional Pride/Institutional Prejudice” (IP/IP) mindset. This means that if a solution for a requirement is available through another venue other than the particular program office, then an Institutional Pride supporting the “Not Invented Here” defense kicks in resulting in an Institutional Prejudice. Often times, this

⁷⁸ Interview with Lt Col Mitch Delarosa, December 17, 2002. Lt Col Delarosa is a career Acquisition Professional who has worked both on numerous major acquisition program, to include the F-16, and V-22, but MAJCOM Program shop as well.

⁷⁹ “Defense Acquisition”, DEPSECDEF Memo, October 30, 2002.

results in a larger than required manpower overhead, along with increased development costs and delayed timelines in fielding a system.⁸⁰

This is compounded even more when a Prime Contractor who has his traditional support base of sub-contractors are either unwilling or ever worse, not allowed by the government to go to another Prime Contractors base of sub-contractors for support. The result is redundancy in developing a particular product. Program Offices must be allowed (and required) to “cross-pollinate” between Program offices and more importantly, be allowed to go to another contractor’s pool of sub-contractors if a solution exists elsewhere.

An additional area to consider providing relief is the field of technology. Moore’s Law states that technology doubles every 12-18 months, and many experts are expecting this timeframe to reduce even more in the next couple of years. If this is even close to being correct, there are two major areas that need to change. First, Program Offices need to be allowed to divert a portion of their management reserve funds into a “skunk works” type of an account. Weapon system are becoming more and more software dependent and the MILSPECS the government applies to programs are too restrictive to allow the capturing of capabilities in a timely manner. There are just too many opportunities and areas of expertise when it comes to field of software to restrict program offices from being able to capture the benefits.

Currently, software is another example of the IP/IP dilemma that handcuffs the acquisition community and both the government and contractors are at fault. Program offices have become so risk adverse that the only acceptable risk solution is the 0% risk question which drives a 100% test answer. In this case, better is the arch enemy of good enough.

⁸⁰ Ibid. Delarosa.

If a solution is met through a software approach, program offices have evolved into a separate software development organization created for the sole purpose to double check the contractor to ensure their approach meets the industry standards. Added to this is the depot facilities adding the same software development organization to double check the program office and the contractor all in the interest of sustainment. This is both wasteful and redundant. Contractors have got to be given more flexibility and greater freedom when it comes to software development. No longer is the defense industry leading the consumer industry by causing fundamental shifts in the way of doing business. The consumer industry is clearly leading this rapidly changing field, and the defense industry is following from the distance and falling further behind.

The only real solution is the requirement of true industry-wide Open Architecture systems. If a new solution becomes available it should be as simple as “plug and play” without having to completely redevelop and retest the systems. This is an area that will require Congressional assistance. Each of the defense contractors advertise that they have an open-architecture system; however the systems may be designed to “plug”, in order to “play” requires a very expensive Interface Control document to make it work.⁸¹ This is where Congress will have to take a step. If the current rules are changed, the defense contractors will fight to have the requirement overturned. This is because it is the one area where contractors can make up losses on from previous contracts and will lead the each of the Defense contractors to lobby Congress to override the requirement. Congress must be willing to help if this problem is going to be resolved.

⁸¹ Ibid. Delarosa.

Finally, there must be an elimination of out-of-date and irrelevant MIL Specs. Currently, our MIL Specs require us to many times develop and test systems to operate in environments they seldom if ever, will be required to operate. An example of where unrealistic acquisition requirements levied on a weapon system is the AC-130U Gunship. The Gunship, whose primary mission is surgically accurate, close air support, was an existing C-130 platform that was converted to the side-firing gunship configuration. The acquisition test community attempted to force the issue of taking one of the 12 aircraft (\$120 million per aircraft) and destroying it by live-fire testing; a procedure where an actual aircraft is shot with different caliber of ammunition to determine the effects of each impact. The logic of this clearly failed any rational thought for two primary reasons. First, the airframe was a C-130 airframe that had been flying for over 40 years. The C-130 was second only to the B-52 in years in service and clearly the Air Force had warehouse rooms full of data on the weapon system. Additional live-fire testing accomplished nothing other than to check a box in the acquisition process. Second, taking one of only 12 of an asset defined as a low-density/high demand asset failed the sanity check. It is one thing to take a fighter aircraft where hundreds are produced and destroy one by live-fire testing. However, reducing a fleet by 1/12, especially when several thousand airframes had been produced over the years did not reflect any value added.⁸² This is only one of numerous examples of being unrealistic in the MIL Spec requirements and expectations. Thermal insulated water jugs designed to maintain the contents at specific temperatures even when outside is well below freezing, even though the water jugs will never be in such a harsh environment is yet another, and the list goes on and on. Clearly this has to stop, or we will never be able to afford the weapon systems of the future because we are spending our limited funds unwisely.

⁸² Ibid. Dougherty.

The Future

Now what? We've seen the history of reforms within the Department of Defense from 1947 through the Goldwater-Nichols Defense Reorganization Act and it is clear that the department's Achilles' heel historically has been resource allocation. Goldwater-Nichols solved many of the problems identified with fighting and wining in the joint environment but the department still has some unfinished business in the area of Resource Allocation.

The Cold War is over, we've had a large draw down in forces, and technology is now breaching upon itself. Combine this with the unprecedented 9/11 terrorist attacks on America and the challenges on the Korean peninsular and it is easy to see the changes on the horizon. We must adapt and change our way of thinking to meet these new challenges. These changes are required because our nation is now confronting a new enemy defined as terrorism; potentially an old enemy, North Korea, which has now been renewed; and to complicate matters even further there are unknown impacts due to possible changes in defense alliances where traditional support when mixed with future membership is yet to be seen. All of these will force a new way of thinking.

As the Defense Department begins to ramp up to meet these challenges, there is no doubt that many of the critics of the DoD will begin to call for defense reforms, especially as we approach the Presidential election year. Weapon system requirements, force structure challenges, and organizational adjustments will no doubt be debated from both sides of the political spectrum. However, just as it has been for the last 50 years, the issue ultimately will come down to resource allocation. Remember, in Washington DC, the philosophy is that there is finite resources and finite power. This will be even more apparent as the new Department of

Homeland Security stands up and not only requires a larger portion of the taxpayers dollars, but has the momentum to support the shift in funds.

In contrast to Homeland Defense, the Department of Defense does not have the flexibility within their budget. With 50% going to infrastructure, 30% going to retirement accounts (both of which are fixed) and only 20% being available to research, procure, and/or modernize the force, makes it increasingly difficult to transform a cold war military to a military positioned to look forward into the 21st Century. Additionally, with the political support presently behind the homeland defense effort, to force additional changes to the Department of Defense will be a challenge at best. This makes it an absolute necessity that the Department begins a top-to-bottom review in order to police itself. Rapid changes in technology require us to harness these changes or we will never be able to afford the next generation weapons. Who knows where we could benefit by using the \$1 Billion we are losing each year with our current commissary system? Without being able to adapt to the new philosophies, we fall pray to chasing technology, never catching it nor being able to afford it, if we ever did. It is not a question of “what needs to be done” to correct the Department of Defense’s Resource Allocation challenges, but a question of “How”? It is time for the Department of Defense to demonstrate they can in fact, police themselves and cure their Achilles’ Heel or Congress will once again feel the need to kick the rudder.

Bibliography

Addresses

Rumsfeld, Donald H., Secretary of Defense. Address. Public remarks delivered during his official welcoming ceremony at the Pentagon, Washington D.C. January 26, 2001.

Books

Bradley, Omar N., *A General's Life: An Autobiography*, New York: Simon & Schuster, Inc., 1983.

Cohen, Eliot A., *Supreme Command*, New York: Simon & Schuster, Inc., 2002.

Eisenhower, Dwight D., *Crusade In Europe*, Garden City, NY: Doubleday, 1948.

Eisenhower Dwight D., *The White House Years: Waging Peace. 1956-1961*, Garden City, NY: Doubleday, 1963.

Kyle, James H., *The Guts to Try*, New York: Crown Publishers, Inc, 1990.

Millett, Alan R. and Peter Maslowski, *For the Common Defense: A Military History of the United States of America*, New York: Free Press, 1984.

Interviews

Delarosa, Mitch, USAF Lt Col. Personal interview. December 17, 2002.

Dougherty, Brian K., USAF Lt Col. Personal interview. September 26, 2002.

Dougherty, Brian K., USAF Lt Col. Personal interview. January 27, 2003.

Napier, Billy B. (Rusty), USAF Col (Ret). Personal interview. November 12, 2002.

Punaro, Arnold L., MGen (Ret.) USMC. Personal interview. February 10, 2003.

Electronic Publications

Caterinicchia, Dan, *Changes coming at the JROC*. October 18, 2002,
<http://www.fcw.com/articles/2002/1014/web-jroc-10-18-02.asp>

The Evolution of the U.S. Intelligence Community-An Historical Overview, Commission on the Roles and Capabilities of the United States Intelligence Community. pp. 9-10.
<http://www.access.gpo.gov/intelligence>

Goldwater-Nichols Act of 1986, U.S. Code, Title 10, Subtitle A, Part 1, Chapter 5, Section 153, (a) 4., http://www.dtic.mil/jcs/core/title_10.html

Neutrality Act. The Columbia Electronic Encyclopedia. Copyright 1994, 2000. Columbia University Press. <http://www.infoplease.com/ce6/history/A0835328.html>.

SecDef Histories-Robert McNamara.
http://www.defenselink.mil/specials/secdef_histories/bios/mcnamara.htm

Government Memorandums

Deputy Secretary of Defense. Memorandum. Subject: *Defense Acquisition*, October 30, 2002.

Government Documents

CJCSI 5123.01A, *Charter of the Joint Requirements Oversight Council*. Washington D.C. 8 March 2001.

The Commission on Organization of the Executive Branch of the Government. *Task Force Report on National Security Organization*. Washington: Government Printing Office, January 1949.

The Commission on the Roles and Capabilities of the United States Intelligence Community. *The Evolution of the U.S. Intelligence Community-An Historical Overview*.

The Constitution of the United States, Article II, Section 2.

The Department of Defense. *Documents on Establishment and Organization, 1944-1978*. OSD Historical Office, Washington D.C., 1978.

The Department of Defense. *The Department of Defense 1947-1997--Organization and Leaders*, OSD Historical Office, Washington D.C., 1997.

JCS Historical Section. *Chronology of Changes in Key West Agreements, April 1948-January 1958*, February 7, 1958, pp 1-4.

JCS Joint Secretariat, *Charter for the Joint Requirements and Management Board*, March 20, 1984.

DoDD 5000.1. *The Defense Acquisition System*, Ch-1. Washington, D.C., January 4, 2001.

DoDI 5000.2. *Operation of the Defense Acquisition System*, Ch-1, Washington, D.C., April 5, 2002.

DoDD 7045.14, May 22, 1984, Change 1, July 28, 1990.

President's Blue Ribbon Commission on Defense Management, David Packard, Chairman, *An Interim Report to the President*, Washington D.C. GPO, February 28, 1986.

President's Blue Ribbon Commission on Defense Management, David Packard, Chairman, *A Quest for Excellence: Final Report to the President*. Washington D.C.GPO, 1986.

The Report of the Commission on the Roles and Missions of the Armed Forces, May 24, 1995.

Rockefeller Brothers Fund, Inc. *International Security—The Military Aspect*, Report of Panel II of the Special Studies Project, 1958.

Title X, U.S. Code. Section 153, Section A.

Title X, U.S. Code. Section 181.Subtitle A, Part 1, Chapter 7.

Wolk, Herman S., *Planning and Organizing the Postwar Air Force 1943-2947*, Office of Air Force History, USAF, Washington D.C., 1984.

Papers

“Framing the Problem of the PPBS”, BENS Tooth-to-Tail Commission on the US Department of Defense's Planning, Programming and Budgeting System (PPBS) Special Report, January 2000, p.4.

McClendon, R. Earl. *Unification of the Armed Forces: Administrative and Legislative Developments 1945-1949*, Unpublished paper. Air University Documentary Research Study No.36, Research Studies Institute, Maxwell Air Force Base, AL, April 1952.

Sullivan, Raymond E. Jr., *Resource Allocation: The Formal Process*, National Security Decision Making Department, U.S. Naval War College, Newport, RI, 7th Edition, February 1, 2002.

Whitlatch, Wayne E., *The Legislative Evolution and Future of the Unified Command*, Unpublished paper. Air Command and Staff College, Air University, Maxwell AFB, AL, June 1966.

Yoshpe, Harry B. and Theodore W. Bauer, *Defense Organization and Management*, Unpublished paper. Industrial College of the Armed Forces, National Defense University, Washington D.C., 1967.

Periodicals

Davis, M. Thomas, "The JROC: Doing What? Going Where?" *National Securities Studies Quarterly*, Summer, 1998. p. 4.

Davis, M. Thomas, "Understanding the Defense Strategic Planning Process, PPBS Evaluation Project", *Business Executives for National Security (BENS)*, 2001.

Halperin, Morton H. and David Halperin, "The Key West Key", *Foreign Policy* No.53 (Winter 1983-1984): 114-130.

Komer Robert W., "Strategymaking in the Pentagon, Reorganizing America's Defense", McLean ,VA: Pergamon-Brassey's, 1985, pp. 207-208.

Lorenz, Stephen R., James A. Hubert, and Keith H. Maxwell, "Linking Resource Allocation to Performance Management and Strategic Planning-An Air Force Challenge", *Aerospace Power Journal*, Winter 2001, p.3.

Lynn, William J., "The Wars Within: The Joint Military Structure and Its Critics", *Reorganizing America's Defense*, p. 171.

Neal, Butch, "The JROC: A Return to the Basics", *National Securities Studies Quarterly*, Winter, 1999. p. 94-100.

Toto, William J., "It's Broken! Fix It!", *Armed Forces Journal International*, April 1996. p.30.

Wolk, Herman S., "Revolt of the Admirals", *Air Force Magazine*, May 1988, Vol.73, No. 5.